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FEDERAL HOUSING ASSISTANCE

Comparing the Characteristics and Costs of Housing Programs

G A O

Accountability ★ Integrity ★ Reliability

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Abbreviations

BMIR	below-market interest rate
CMT	constant maturity treasuries
FHA	Federal Housing Administration
HUD	Department of Housing and Urban Development
IRS	Internal Revenue Service
NCSHA	National Council of State Housing Agencies
PDV	present discounted value
RAP	rental assistance payment
RHS	Rural Housing Service
USDA	U.S. Department of Agriculture

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For more than 60 years, the federal government has provided assistance to improve the condition and reduce the cost of rental housing for low- and very-low-income households.[1] In fiscal year 1999, about 5.2 million such households received about $28.7 billion in federal housing assistance through more than a dozen programs. Despite this level of assistance, the Department of Housing and Urban Development (HUD) estimates that almost 9 million other very-low-income households still have serious housing needs. The most widespread problem facing these households is a lack of affordable housing; many pay more than 30 percent of their income for rent.[2] To help the Congress and others better understand how federal resources are used to respond to these needs, we analyzed the characteristics and costs of the housing under various federal programs. Our analysis focuses on six active programs that continue to increase the number of households assisted by the federal government.[3] These programs, as described below, include the Housing Choice Voucher Program (housing vouchers), which is the largest source of federal funds for housing assistance, and five production programs, which currently receive federal funds to construct or substantially rehabilitate units.

- **Housing Vouchers** supplement tenants' rental payments in privately owned, moderately priced apartments chosen by the tenants.

- **Low-Income Housing Tax Credits** provide tax incentives for private investment and are often used in conjunction with other federal and

[1]Federal rental assistance programs define "low-income" households as those with incomes 80 percent or below of area median income and "very-low-income" households as those with incomes 50 percent or below of area median income.

[2]See HUD's *A Report on Worst Case Housing Needs in 1999: New Opportunity Amid Continuing Challenges*, January 2001. According to HUD, almost 5 million of these unassisted households have "worst-case" housing needs, meaning that they pay over 50 percent of their income for rent, live in substandard or overcrowded housing, or both.

[3]This analysis does not treat the HOME program as a separate production program because HOME grants are often used in conjunction with other housing production programs. The HOME funds provided with the production programs discussed in this report are included in our analyses of these programs' costs.

state subsidies in the production of new and rehabilitated affordable housing units consistent with state-determined housing priorities.

- **HOPE VI** provides grants—coupled with funds from other federal, state, local, and private sources—to revitalize severely distressed public housing, support community and social services, and promote mixed-income communities.[4]

- **Section 202** provides grants to develop supportive housing for the elderly.

- **Section 811** provides grants to develop supportive housing for persons with disabilities.

- **Section 515** provides below-market loans to support the development of housing for families and the elderly in rural areas.

To obtain information on how federal housing resources could be used more effectively, the Congress directed in the Quality Housing and Work Responsibility Act of 1998 that we compare the total per-unit costs of housing assistance programs, taking into account qualitative differences in the programs. In response to the mandate and as agreed with your offices, we (1) described characteristics of the housing provided under the six active housing assistance programs; (2) estimated the per-unit cost of each of these programs; (3) computed the portion of each program's per-unit cost paid by the federal government, tenants, and others (state, local, and private sources); and (4) identified public policy issues raised by our study, taking into account tradeoffs between the programs' costs and qualitative differences. We developed and presented preliminary responses to these questions in an interim report.[5]

[4]HOPE VI replaces existing public housing units and, therefore, does not increase the supply of affordable housing. Since 1994, public housing has not received new appropriations to fund incremental units. Nonetheless, we included HOPE VI among the active housing programs because it represents an ambitious effort to improve the quality of the housing provided under the program. Additionally, while other modernization efforts are funded through public housing's capital fund, the HOPE VI program was able to provide more extensive cost data, which greatly facilitated our analysis.

[5]*Federal Housing Programs: What They Cost and What They Provide* (GAO-01-901R, July 18, 2001).

To perform our work, we collected and analyzed data on housing costs and characteristics and tenant income for the nation as a whole and for seven metropolitan areas, three of which we visited to observe qualitative differences in representative properties provided under each of the programs. We obtained the data for our analysis from HUD and other federal agencies, public housing authorities, state housing finance agencies, property managers, industry groups, and previous studies on tax credits.[6] While the average total per-unit costs of housing vouchers and the production programs can be estimated over any period, we developed 30-year (life-cycle) cost estimates. We chose 30 years for our life-cycle estimates because this is generally the minimal length of time that properties developed through federal housing programs can be expected to serve low-income households. Appendixes I and II provide more details on our methodology and cost estimates.

Results in Brief

The housing provided under the six active federal programs varies widely in certain characteristics, such as age, building type, unit size, location, and services, both across and within programs. Housing vouchers are used almost exclusively in existing, older multifamily and single-family properties in the private housing market. The housing voucher, tax credit, and HOPE VI programs make available a broad range of building types and unit sizes. By contrast, the Section 202, Section 811, and Section 515 programs typically deliver a narrower range of building types and provide smaller units. Most of the assisted housing are located in suburbs and central cities, except for Section 515 developments, which are situated in rural areas. Compared with the neighborhoods where other program properties are located, HOPE VI neighborhoods are poorer, with higher percentages of minority households and lower percentages of homeowners. The HOPE VI program offers a broad array of services and amenities to residents, including employment and child care services. The Section 202 and Section 811 programs provide specific services and amenities that are targeted to the special needs of the elderly and persons with disabilities, respectively. For the remaining programs, the level of specific services and amenities varies from property to property.

[6] *Tax Credits: Opportunities to Improve Oversight of the Low-Income Housing Program* (GAO/GGD/RCED-97-55, Mar. 28, 1997) and *Building Affordable Rental Housing: An Analysis of the Low-Income Housing Tax Credit*, City Research (Boston: 1998).

We estimated that, for units with the same number of bedrooms in the same general location, the production programs cost more than housing vouchers. According to our estimates, in metropolitan areas, the average total 30-year costs of the production programs range from 8 percent greater for one-bedroom units under the Section 811 program to 19 percent greater under the tax credit program. For two-bedroom units, the average total 30-year costs range from 6 percent greater under the Section 811 program to 14 percent greater under the tax credit program. Although data were not available to present total costs by unit size for the HOPE VI program, the total cost of a HOPE VI unit with an average size of 2.4 bedrooms is about 27 percent more expensive than vouchers. These differences in costs between the production programs and vouchers are greater in nonmetropolitan areas than in metropolitan areas. Across the production programs, the total costs of one- and two-bedroom units are generally similar. Despite these programwide averages, the costs of individual properties vary substantially, primarily because of differences in rents and total development costs.

Across the six active programs, the federal government and tenants pay the majority of the programs' total costs. For all of the programs except tax credits, the federal government pays the largest percentage of the average total per-unit costs (from 65 percent for vouchers to 71 percent for HOPE VI over 30 years). Under the tax credit program, the tenants pay the largest share of the total cost (54 percent over 30 years); however, they have higher incomes, on average, and pay a larger percentage of their income for rent than other assisted households. If the incomes and rent burdens of voucher households equaled those for each of the production programs, the federal government would pay more for one- and two-bedroom units under the production programs than under the voucher program. Contributions from state, local, and private sources are generally small as a percentage of total costs (from 2 percent for Section 202 to 7 percent for HOPE VI over 30 years); however, larger-than-average contributions in certain locations can reduce rents paid by tenants and the federal cost of rental assistance.

Our work raises a number of housing policy issues, including the relative costs and benefits of the voucher and production programs and whether there are opportunities for controlling costs to stretch federal housing dollars as far as possible. The absence of comprehensive and consistent data is an impediment to monitoring and evaluating housing programs. While production programs cost more than vouchers, all housing programs provide benefits in addition to housing the poor. Production programs

have other goals, such as increasing the supply of affordable housing, accommodating special needs, or revitalizing distressed communities. Housing vouchers also have other goals, such as promoting mobility and neighborhood choice. Accordingly, the benefits derived from achieving these goals must be weighed against the programs' costs. Increasing contributions from nonfederal subsidy providers could free federal funding to serve additional households, and further research might identify opportunities to better contain development costs. Additionally, cost control strategies must take into account the costs to the federal government of setting aside sufficient reserves to meet future capital needs. To evaluate the relative effectiveness of the six housing programs in meeting national housing policy objectives and to identify opportunities for controlling costs, further research is needed. However, the comprehensive, consistent data required for such research are not always readily available. For example, for tax credits, the largest housing production program, there is no centralized national database that includes information on costs.

Background

The federal government has helped to provide affordable housing to low-income households since the passage of the United States Housing Act of 1937. Since then, federal housing programs have either subsidized the construction of housing for the poor or provided rental assistance to tenants in existing privately owned housing. Until 1974, federal housing programs primarily supported the construction of affordable housing. Then, in 1974, the Congress added Section 8 of the 1937 Act, which established a new certificate program that relied on existing, privately owned rental housing. The certificate program was merged in 1998 with a similar program and renamed the Housing Choice Voucher Program. Under the voucher program, the subsidy is tied to the household (tenant-based). The household can choose to use the subsidy at any available unit that meets the program's standards, and, if the household chooses to move, the subsidy continues as long as the new unit also meets the program's standards. Since the early 1980s, housing vouchers have been the centerpiece of federal housing assistance. Conversely, under the production programs, the subsidy is tied to the unit (project-based), and the household can benefit from the subsidy only while living in the subsidized unit. (See app. III for more information on the evolution of federal housing assistance programs.)

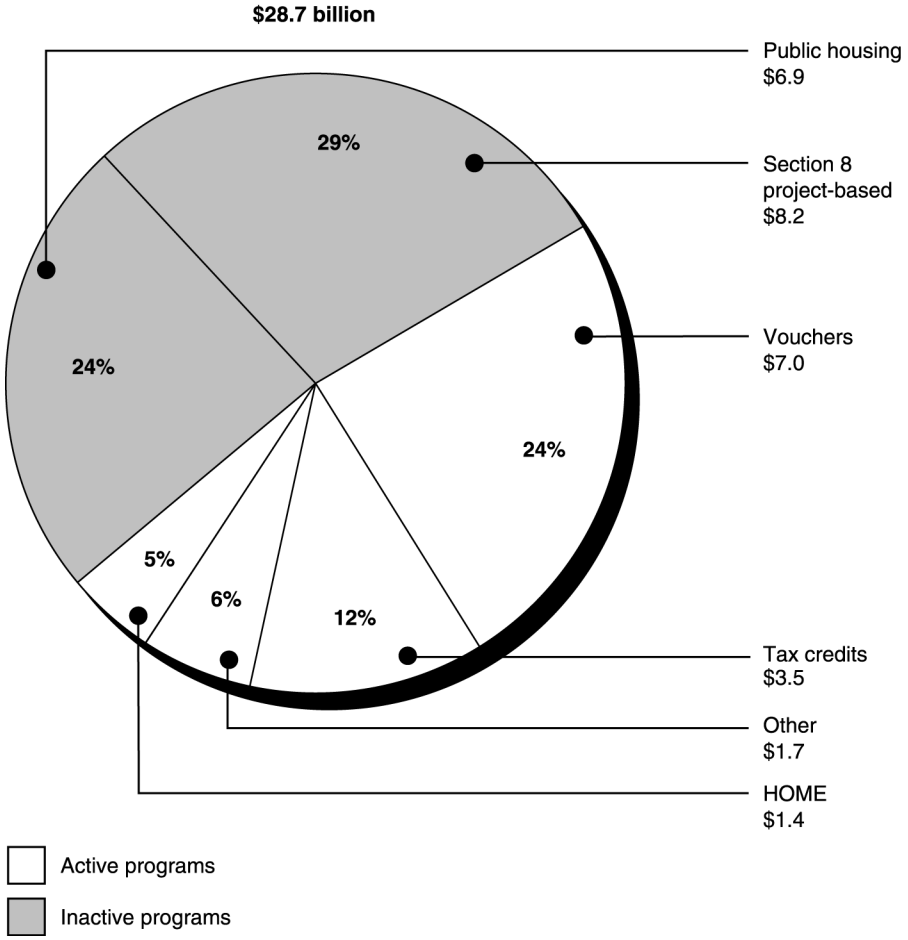
Of the approximately 5.2 million renter households assisted by the federal government in 1999, about 2.7 million were assisted by programs that no longer receive appropriations to produce additional units. We refer to these

programs as "inactive." Appropriations are, however, provided to fund project-based rental assistance, interest reduction payments, and operating subsidies for the units developed under these programs in previous years. The remaining 2.5 million units are subsidized under the six active programs that receive appropriations both to add new units and to subsidize units funded in previous years. In addition, households in some units benefit from overlapping subsidies. For example, about 6 percent of voucher households rent units developed under the production programs, particularly under tax credits.

In fiscal year 1999, the federal government spent about $28.7 billion, including $3.5 billion in tax credits, for both the active and inactive housing programs. Of this combined amount, about $15.1 billion supported units funded under the inactive programs, and about $13.6 billion in budgetary outlays and tax credits supported the active programs. As shown in figure 1, the voucher program is the largest of the active programs, accounting for about 52 percent of the federal funding for them. The tax credit program accounts for about 26 percent of the federal funding for active programs, the HOME program about 10 percent, the Section 202 and Section 811 programs about 5 percent, the Section 515 program about 5 percent,[7] and the HOPE VI program about 2 percent. Appendix IV contains detailed information on the federal expenditures on housing programs, including the number of units and the costs associated with each of the active and inactive programs in fiscal year 1999.

[7]We include outlays for rental assistance provided to Section 515 units under the Section 521 program.

Figure 1: Budgetary Outlays and Tax Expenditures for Active and Inactive Housing Assistance Programs, Fiscal Year 1999, Dollars in Millions



Note: Total equals $28.7 billion in budgetary outlays and tax expenditures. Outlays for Section 8 project-based include New Construction/Substantial Rehabilitation, Loan Management Set-Aside, Property Disposition, Section 236, and Rent Supplement. Outlays for "other" include Section 202, Section 811, Section 515, Section 521, and HOPE VI. As previously stated, we identify HOME as an active program, but our analysis does not treat it as a separate program because HOME grants are often used in conjunction with other housing programs.

In the private rental housing market, the rent covers the total cost of providing a housing unit, including the operating expenses (e.g., administrative expenses, utilities, routine maintenance, and property taxes); debt service; deposits to a replacement reserve for major capital improvements over time; and a market return to equity investors. Under the voucher program, the rent also covers the total cost of providing a

housing unit. The assisted household generally pays 30 percent of its income for rent, and the voucher makes up the difference between the household's contribution and the market rent. In addition, the federal government pays a fee, equal to about 7 to 8 percent of the rent, to the public housing authority that administers the voucher program locally on HUD's behalf. Thus, under the voucher program, the following formula applies:

Total Costs = Rents + Administrative Fee

In this formula, rents include contributions by the voucher program and assisted household.

Under the production programs, the federal government provides development subsidies for new construction or substantial rehabilitation and frequently provides rental assistance. State and local governments or private entities may provide additional development subsidies. These federal and nonfederal subsidies can take various forms, including grants, low-interest-rate loans, and tax credits. The subsidies can lower the rents, provide additional services or amenities, or both. When the federal government provides rental assistance, the assisted household generally pays 30 percent of its income toward rent, and the government makes up the difference.[8] Thus, under the production programs, the following formula applies:

Total Costs = Rents + Development Subsidies

Rents also include contributions by the housing program and assisted household.[9]

For both vouchers and the production programs, our estimates of total costs recognize that rents are paid over many years and development

[8]The public housing residents of HOPE VI properties; most Section 202, Section 811, and Section 515 households; and, according to our estimate, about 40 percent of tax credit households receive rental assistance, pay about 30 percent of their income for rent, or both.

[9]We did not include the costs incurred by federal and other government agencies to administer and monitor the programs since these costs are not identified in sufficient detail in the agencies' records. However, we believe these costs to be extremely small relative to those costs that we have accounted for.

subsidies are paid either up front or over many years. Appendix I provides further details on the conceptual framework for our methodology.

Vouchers and the production programs are subject to and insulated from different cost risks over time. Whereas vouchers are vulnerable to inflation in market rents, the production programs are less vulnerable because of federal regulations or limits on rents associated with development subsidies. However, the production programs can pose substantial cost risks if capital reserves are underfunded, as they often have been in the past. Vouchers pose no such risk because the federal government has no commitment to specific units.

Both the voucher and the production programs are subject to cost-containment guidelines. For the voucher program, HUD sets payment standards that are based on fair market rents for over 2,700 market areas, taking into account unit size (number of bedrooms). These payment standards are intended to give assisted households a selection of units and neighborhoods while containing costs. Public housing authorities can ask HUD to increase local rent ceilings if they believe increases are warranted. For the production programs, the cost-containment guidelines are intended to provide properties of modest design. These guidelines may establish cost limits that vary by location, type of building (e.g., elevator or garden-style), and unit size, or they may simply require assurances that the costs of proposed properties are reasonable.

With two exceptions, federal housing assistance programs are administered by HUD. The exceptions are the Section 515 program, which is administered by the U.S. Department of Agriculture's (USDA) Rural Housing Service (RHS), and the low-income housing tax credit program, whose administrative responsibilities are shared by state and local housing finance agencies and the Internal Revenue Service (IRS) within the Department of the Treasury. The state and local agencies allocate tax credits to individual properties within their jurisdictions, set cost-containment guidelines, and provide general oversight. IRS oversees compliance with the Tax Code.

Programs Provide a Wide Range of Housing and Services

Under the six active programs, properties vary in age, type, the number of units, the number of bedrooms within units, location, neighborhood, amenities, and condition. The emphasis placed on social services also varies considerably. Figure 2 illustrates some of the many types of housing provided under the six active housing programs.

Figure 2: Housing Provided Under the Six Active Programs

Vouchers

HOPE VI

Tax credits

Section 202

Section 515

Section 811

Note: The pictures contained in this figure illustrate the following: (a) vouchers—an 80-year-old three-story apartment complex in central Boston; (b) tax credits—a rehabilitated single-room-occupancy dwelling for the homeless in a Baltimore suburb; (c) HOPE VI—a newly constructed apartment complex in central Atlanta; (d) Section 202—a newly constructed, elevator high-rise for the elderly in a Baltimore suburb; (e) Section 811—a rehabilitated group home for persons with mental disabilities in a Fort Worth suburb; and (f) Section 515—a newly constructed, walk-up apartment for the elderly in rural Wachusetts, Mass.

Age, Type, and Size of Program Properties

Housing vouchers are used almost exclusively in existing properties whose median age nationwide is about 35 years, ranging from about 65 years in the Northeast to about 30 years in the West. According to HUD data, about three-quarters of vouchers are used in multifamily dwellings, and the remainder are used in single-family homes. Production program properties are either newly constructed or substantially rehabilitated. For example, the HOPE VI program replaces or renovates severely distressed public housing developments as part of a broader community revitalization strategy. The new or rehabilitated properties often include special design features that are intended to integrate the public housing community with the neighborhood. HOPE VI properties, which have an average of nearly 300 units, span the full range of building types, from detached homes to row houses to elevator buildings.

The tax credit and Section 811 programs also provide newly constructed and substantially rehabilitated properties. Most tax credit properties are multifamily buildings, including single-room-occupancy dwellings, walk-up apartments, town houses and row houses, and elevator buildings, and have an average of 77 units. This average does not include tax credit properties with Section 515 mortgages.[10] Section 811 properties are predominantly of two types—independent living projects and group homes. Independent living projects generally provide separate apartments with individual kitchens and bathrooms, while group homes typically include a bedroom for each resident and a common kitchen, dining, and living area. Section 811 properties range from single-family dwellings to walk-up apartments and have an average of about 12 units. Group homes, however, must house no more than six persons.

Finally, the Section 202 and Section 515 programs primarily provide newly constructed properties. Section 202 properties are generally mid- and high-rise buildings with elevators, averaging 45 units nationwide, whereas most

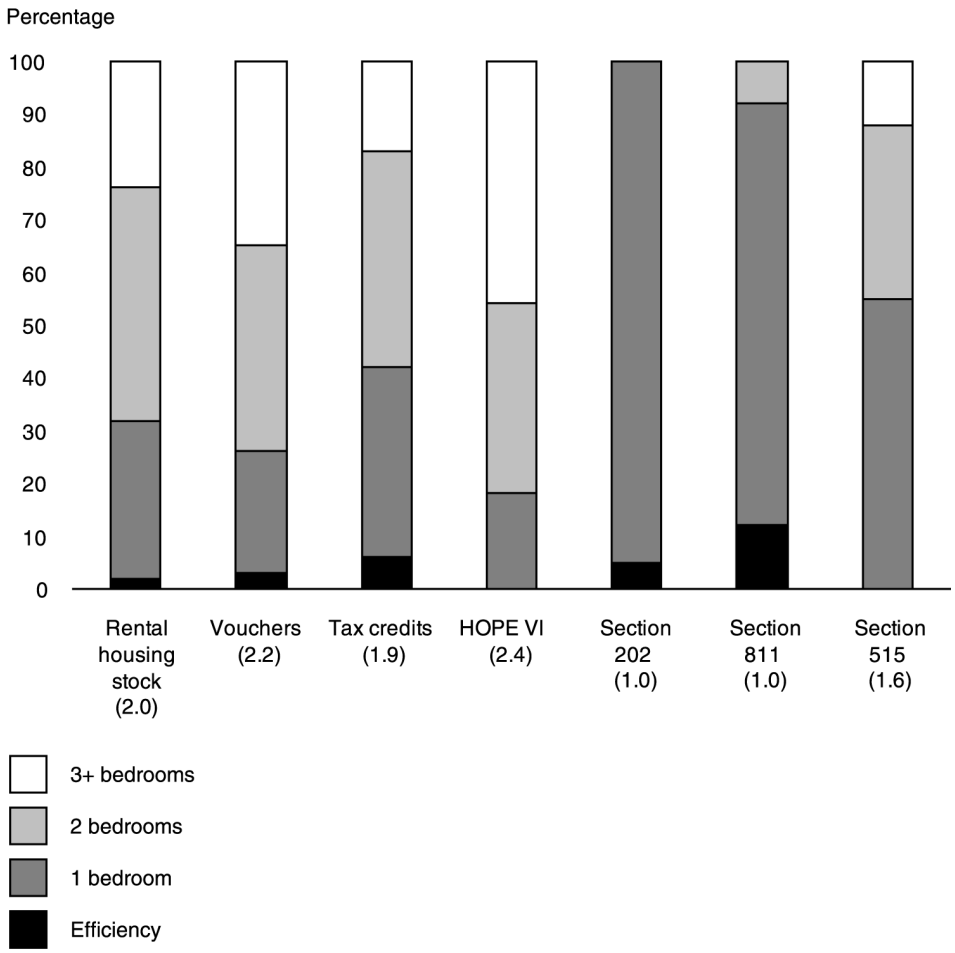
[10]For the nation, the average size of tax credit properties with Section 515 mortgages is 32 units. The average size of all tax credit properties is 57.

Section 515 properties are walk-up apartments and often consist of no more than 24 units, which is a size consistent with the lower population densities of rural areas.

Average Size and Distribution of Program Units

Across the six active programs, units vary in their average size (as measured by the number of bedrooms) and distribution across size, as shown in figure 3. The average number of bedrooms ranges from 1.0 for the Section 202 and Section 811 programs to 2.4 for the HOPE VI program. Vouchers and tax credits provide higher percentages of larger family units, while the Section 515 program includes a mixture of larger units for families and smaller units for the elderly.

Figure 3: Distribution and Average Size of Units in the Six Active Housing Programs



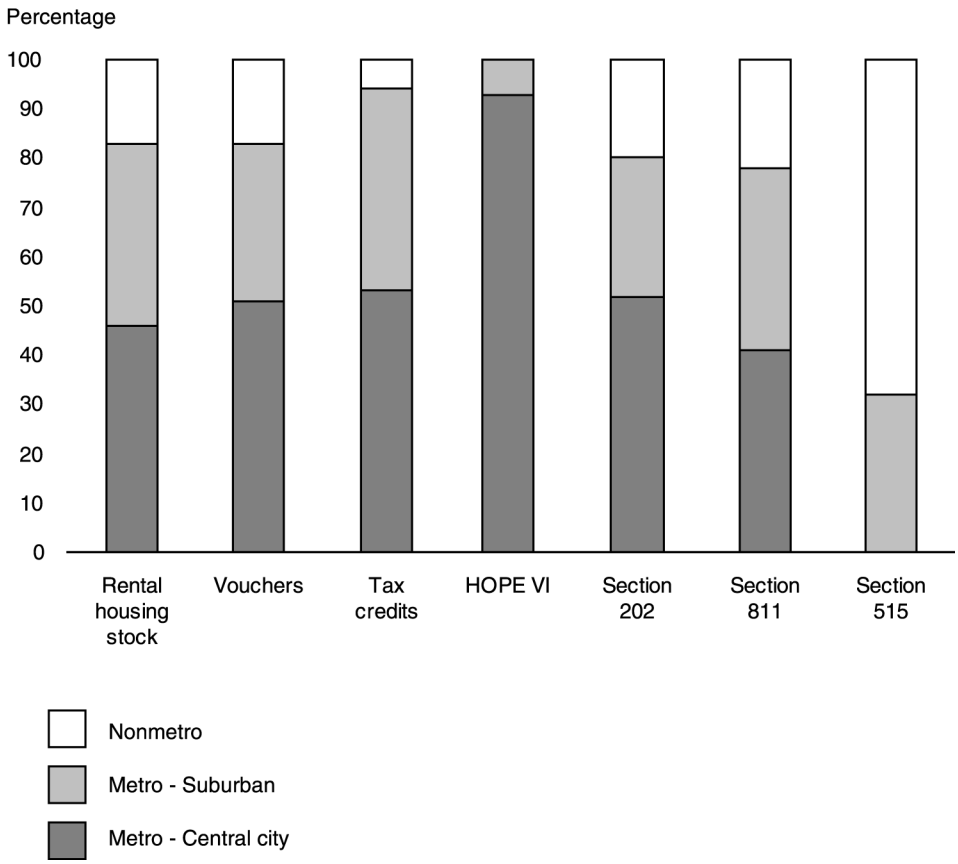
Note: Average number of bedrooms appears in parentheses.

Location of Program Properties

Most assisted housing is located in metropolitan areas—a broad term that includes both central cities and suburbs—but the location of properties varies somewhat by program. As figure 4 indicates, all HOPE VI units are found in metropolitan areas, with about 90 percent in central cities. In addition, about 94 percent of tax credit units[11] and about 80 percent of voucher, Section 202, and Section 811 units are located in metropolitan areas. Moreover, for all of these programs, the majority of the metropolitan-area units are located in central cities. By contrast, nearly 70 percent of Section 515 units are found in rural nonmetropolitan areas, with the balance in the rural parts of metropolitan areas.

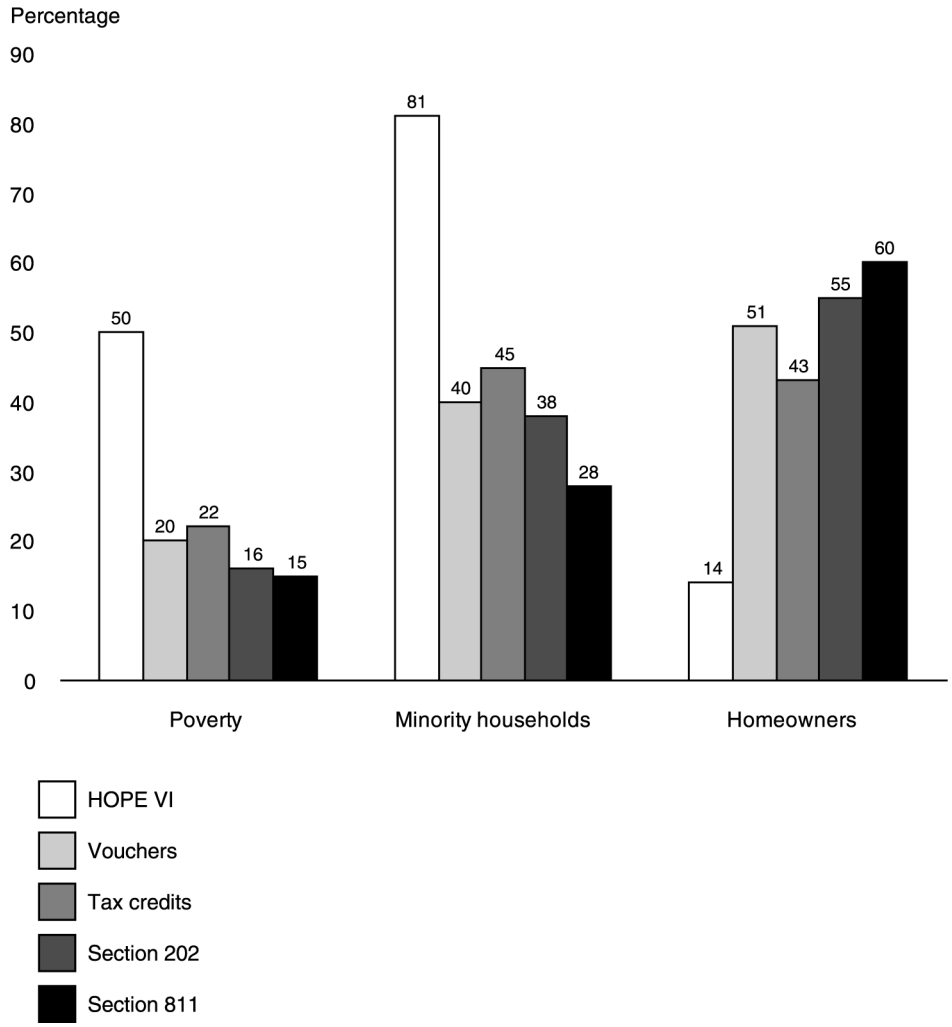
[11]This percentage excludes tax credit units in properties with Section 515 mortgages because we included these units in our calculations for the Section 515 program. If these units were included in our calculations for tax credits, the percentage of units in nonmetropolitan areas would increase from about 6 percent to about 22 percent.

Figure 4: General Location of Units in the Six Active Housing Programs



The neighborhoods where assisted housing is located also vary. According to data from the Bureau of the Census, the census tracts where HOPE VI units are found are poorer than the census tracts where other program units are located. HOPE VI census tracts also have higher percentages of minority households and lower percentages of homeowners. In general, the demographic characteristics of the census tracts where other program properties are located are fairly similar, as shown in figure 5.

Figure 5: Demographic Characteristics of Neighborhoods Where Assisted Housing Is Located



Note: The data for poverty indicate the percentage of neighborhood households with incomes below a certain threshold adjusted for family size as determined by the Bureau of the Census. In addition, the figure excludes data for Section 515 units because the addresses of Section 515 properties were not readily available.

Services Provided and Amenities

Besides providing a range of property types with units of different sizes in different locations, the six active programs vary in the extent to which they make supportive services[12] and amenities available to assisted households. In general, supportive services are not an integral part of the voucher, tax credit, and Section 515 programs. However, when individual tax credit and Section 515 properties serve households with special needs, such as the elderly or persons with disabilities, they may provide services and amenities similar to those provided in Section 202 and Section 811 properties. Section 202 properties typically include congregate dining facilities, and both Section 202 and Section 811 properties include common rooms and may make transportation, housekeeping, and health care services available. The HOPE VI program emphasizes services, allowing up to 15 percent of the HOPE VI grant to be used for community and supportive services. For example, HOPE VI developments often include employment or job training centers as well as facilities for children. Production program units are more likely to have modern amenities, whereas voucher units typically have amenities characteristic of older rental properties. In addition, although it is expected that new units under the production programs start out in better condition than the older units under the voucher program, over time, the condition of these new units, as well as existing units, depends on the level of maintenance and reinvestment.

Production Programs Cost More Than Vouchers

We estimate that, in the same general location, it costs more, on average, to provide one- and two-bedroom units under each of the production programs than it does under the voucher program. The differences between production programs and vouchers are greater in nonmetropolitan areas than in metropolitan areas. Across the production programs, the total costs of one- and two-bedroom units are generally similar. Within individual programs, the total per-unit costs vary considerably from property to property, even within the same metropolitan area, largely because of differences in the properties' rents and total development costs. Actual total costs for the production programs are higher than our estimates because data on local property tax abatements

[12]Supportive services provide residents with the assistance needed to live independently. In the case of elderly residents, such services can include transportation, dining services, and recreation.

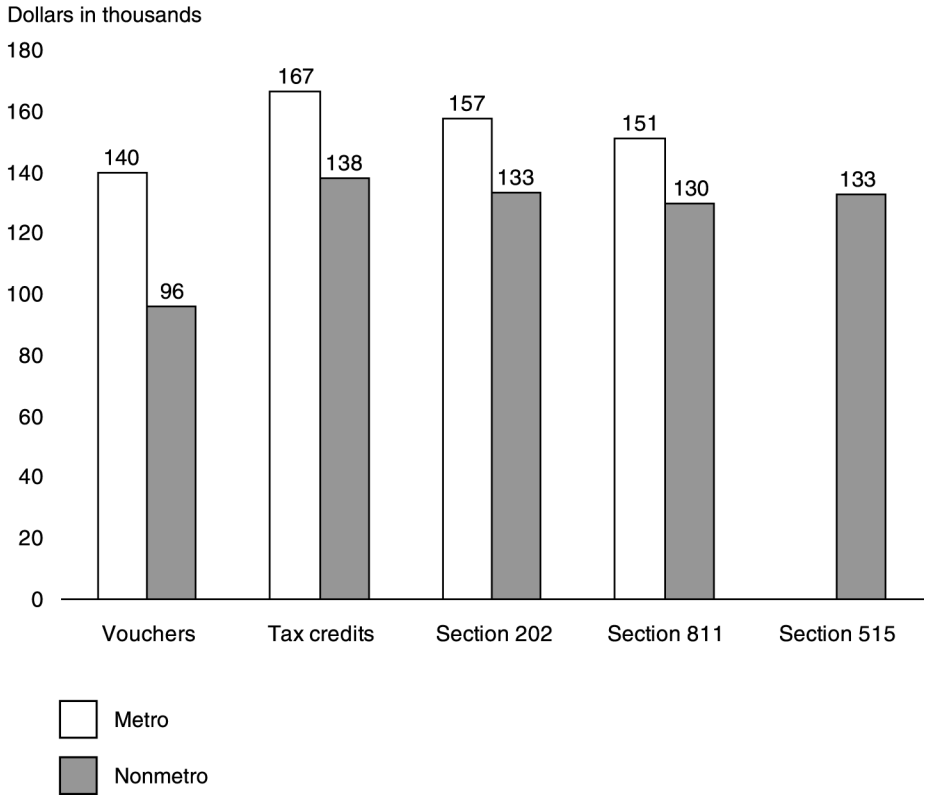
and the possible underfunding of reserves to meet future capital needs were not available.

Production Programs Cost More Than Vouchers in Both Metropolitan and Nonmetropolitan Areas

In both metropolitan and nonmetropolitan areas, the average total 30-year cost of each of the production programs exceeds the cost of providing a voucher for a unit with the same number of bedrooms. To control the impact of unit size on costs, we compared the costs of units with the same number of bedrooms across programs. We focused on one- and two-bedroom units because they are provided under most of the programs and generally account for over 60 percent of each program's units. (We could not include HOPE VI, the program with the largest average unit size, in this analysis because data were not available to present total cost by unit size.) As shown in figure 6, in metropolitan areas, the average total cost ranges from $139,520 for vouchers to $166,610 for tax credits. Compared with vouchers, the production programs cost from 8 percent more for Section 811 units to 19 percent more for tax credit units.[13] In nonmetropolitan areas, the average total cost ranges from $95,890 for vouchers to $138,060 for tax credits, and, compared with vouchers, the production programs cost from 35 percent more for Section 811 units to 44 percent more for tax credit units.

[13]In our July interim report, we presented total costs for 30 years and for the first year. This report also presents total costs for 30 years, with first-year costs presented in appendix I. The total cost in the first year is the sum of the rent paid in the first year plus the annual payment for all development subsidies, assuming a 30-year life. Under both cost estimates, production programs are more expensive than vouchers. The disparities in costs between each of the production programs and vouchers are more pronounced in the first year than over 30 years because rents are higher for vouchers than for the production programs, which use development subsidies to reduce rents (see table 4 in app. I). As a result, rent inflation has a more significant impact on the cost of vouchers than on the costs of the production programs, thereby narrowing the disparities in costs between the two over time.

Figure 6: Average Total 30-Year Cost of One-Bedroom Units, by General Location

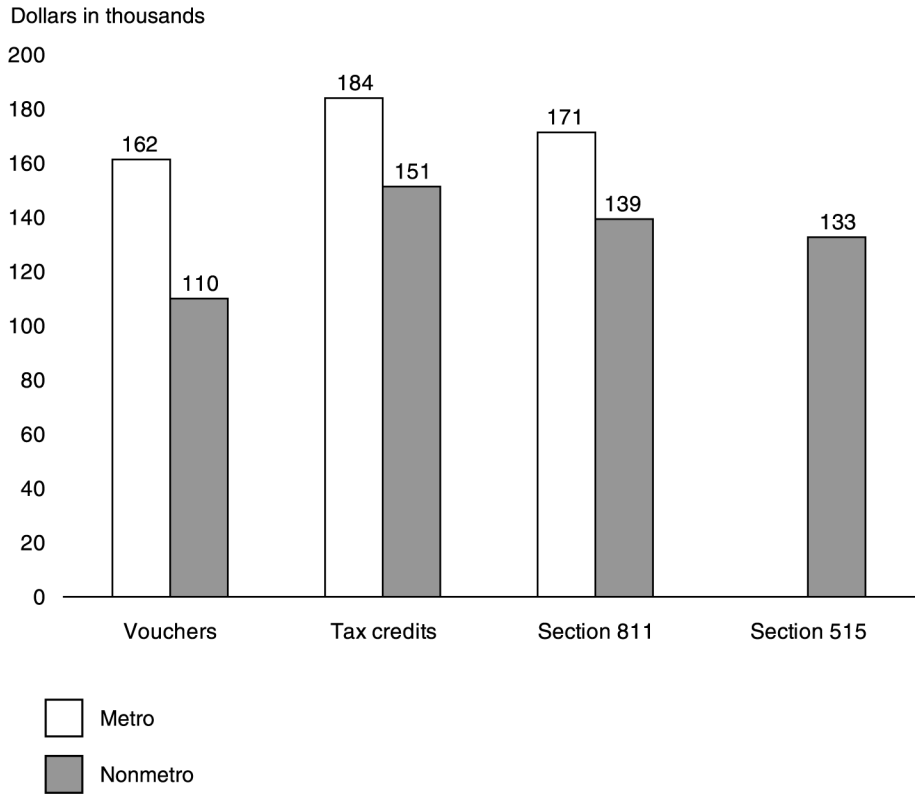


Note: Since Section 515 is a rural program, we present our cost estimate of Section 515 for nonmetropolitan areas only.

The drop in average total cost from metropolitan to nonmetropolitan areas for one-bedroom units is greatest for the voucher program. Vouchers in nonmetropolitan areas cost 31 percent less than vouchers in metropolitan areas. For the production programs, nonmetropolitan units cost from 14 percent less than metropolitan units under Section 811 to 17 percent less under tax credits.

As shown in figure 7, examining the costs of two-bedroom units yields similar results. In metropolitan areas, the average total costs range from $161,650 for the voucher program to $184,130 for the tax credit program. Compared with vouchers, the production programs cost from 6 percent more for Section 811 units to 14 percent more for tax credit units. In nonmetropolitan areas, the production programs cost from 20 percent more for Section 515 units to 38 percent more for tax credit units.[14] Again, the drop in total cost from metropolitan to nonmetropolitan areas for two-bedroom units is greatest for the voucher program.

Figure 7: Average Total 30-Year Cost of Two-Bedroom Units, by General Location



[14]In the seven metropolitan areas we selected for review, one- and two-bedroom production program units are also more expensive than one- and two-bedroom voucher units, respectively. Costs for one- and two-bedroom units for the seven metropolitan areas are provided in tables 7 and 8 in appendix I.

Note: Section 202 is not included in this analysis because it produces mainly efficiencies and one-bedroom units. Also, since Section 515 is a rural program, we present our cost estimate of Section 515 for nonmetropolitan areas only.

For units greater than two bedrooms, cost data were available for two programs—tax credits and vouchers. We estimate that the average total cost of three-bedroom units in metropolitan areas is about $203,510 for tax credits and $196,470 for vouchers—a difference of about 4 percent. In nonmetropolitan areas, the average total cost is about $179,400 for tax credits and $131,580 for vouchers—a difference of about 36 percent. Overall, we find that the cost differentials between production programs and vouchers decrease as unit size increases.

We could not include the HOPE VI program in figures 6 and 7 because, again, data were not available to present total costs by unit size. However, the total cost of an average HOPE VI unit, with 2.4 bedrooms, is $223,190—this figure includes only housing-related construction costs. We estimate that the average voucher cost of a 2.4-bedroom voucher unit is $175,580. According to these estimates, the HOPE VI program is about 27 percent more expensive than the voucher program.[15] If the costs of remediation, demolition, construction of housing and community facilities, relocation, and community-based planning and participation—in addition to housing-related construction costs—were included, the average total cost of the program would be $248,720 or 42 percent more expensive than vouchers.

Across the production programs, the average total costs are very similar to each other. For one-bedroom units in metropolitan areas, the average 30-year cost of the most expensive program (tax credits) is 10 percent greater than that of the least expensive one (Section 811). In nonmetropolitan areas, the difference in the average total cost for one-bedroom units between the most expensive program (tax credits) and the least expensive one (Section 811) is even smaller—only 6 percent. The average total costs of two-bedroom units are also similar across production programs in metropolitan and nonmetropolitan areas.

[15]This comparison of HOPE VI and voucher costs follows the method employed in our interim report, in which we compared the cost of each of the production programs with the cost of vouchers. In that report, we took the actual rents for voucher units of different sizes and interpolated a rent consistent with the average bedroom size for each specific production program. Because these pairwise cost comparisons use a different average unit size for each of the programs, we cannot compare costs across the production programs. We did not normalize all of the production programs to 2.4 bedrooms because this size is considerably larger than the typical units under the other programs. Figures 6 and 7 permit comparisons for the most common unit sizes.

Total Costs Vary Across Individual Properties

The average total costs of the voucher and production programs vary across individual properties, even within the same metropolitan area, primarily because of variations in the rents charged for the voucher program and by the development costs for the production programs.[16] For example, in the Boston metropolitan area, the market rents for two-bedroom voucher units range from about $540 to $1,300 per month, and the average total development costs of two-bedroom tax credit units range from about $44,800 to $293,340 per unit.

Neighborhood characteristics may influence market rents and total development costs (in particular, the value of land). Under the voucher program, variations in market rents within a metropolitan area for similar-sized units may be influenced by neighborhood differences, such as quality of schools, crime rates, and pollution.[17] Market rents may also be influenced by the quality of the units, proximity to jobs and shopping centers, and the amenities and services offered. Under the production programs, variations in total development costs within a metropolitan area reflect not only differences in neighborhoods but also in property and unit amenities, project sponsors, program requirements, and a host of other factors.[18]

[16]For some of the programs reviewed, variances in the costs of individual properties in certain locations can also be due to their small sample sizes.

[17]A detailed discussion of the impact of housing characteristics and public amenities on housing rents is found in chapters 3, 4, and 14 in Denise DiPasquale and William C. Wheaton, *Urban Economics and Real Estate Markets* (1996).

[18]The impact of property and neighborhood characteristics on total development costs for the tax credit program is analyzed in Jean L. Cummings and Denise DiPasquale, "The Low-Income Housing Tax Credit: The First Ten Years," *Housing Policy Debate*, Vol. 10, Issue 2 (1999), pp. 251-307. GAO also analyzed these issues in *Tax Credits: Reasons for Cost Differences in Housing Built by For-Profit and Nonprofit Developers* (GAO/RCED-99-60, Mar. 10, 1999). For more information, HUD measured and explained the differences in total development costs among the inactive housing production programs in *The Costs of HUD Multifamily Housing Programs*, HUD, Office of Policy Development and Research (1982).

For HOPE VI and tax credits, we find high-cost properties located in very poor neighborhoods where market rents would be insufficient to generate new construction. Often, production programs, by design, build housing in neighborhoods where the market would not. There may be additional costs of building in these neighborhoods. Additional costs may also result from compliance with federal wage and hiring regulations[19] and from participation of less experienced developers, such as housing authorities or neighborhood groups, that may be less efficient than larger developers who have better construction management capacity.[20] Nonetheless, it is doubtful that these factors alone account for the high costs of the most expensive projects in our database, some of which exceed $200,000 per unit.

[19]According to HUD, all HOPE VI developments must follow these regulations, including the Davis-Bacon Act, Section 3 requirements to hire small and minority contractors, and resident participation requirements. For example, HUD stated that, depending on the local construction labor market, Davis-Bacon alone, which requires construction workers to receive locally prevailing wages and fringe benefits, can increase construction costs by as much as 25 percent.

[20]HOPE VI officials recognized that, unlike private sector developers, many housing authorities hire program and construction managers to oversee HOPE VI developments, which can increase costs. Also, see Cummings and DiPasquale (1999), pp. 260 and 261.

Data Were Not Available to Account for Local Property Tax Abatements and Underfunding of Capital Reserves

Actual total costs for the production programs are somewhat higher than our estimates because our estimates do not reflect the value of abated property taxes or shortfalls in capital reserves. Under each production program, some properties receive tax abatements, and, historically, sufficient reserves for capital replacements and improvements have not been set aside.[21] Indeed, if future subsidies are needed to maintain the properties under the production programs, our cost estimates understate the actual costs. Although data were not available to estimate the additional costs of property tax abatements and capital reserve shortfalls for individual properties, we estimated, on the basis of industry averages, that under a worst-case scenario (i.e., total tax abatements and no payments to reserves), the total 30-year costs would be understated by nearly 15 percent.[22] This scenario is most applicable to the HOPE VI program, in which full property taxes are not paid and capital reserves are not fully funded. Under the other four production programs, many properties fund capital reserves and pay full property taxes. For these programs, our cost estimates are likely to be understated by less than 15 percent.

[21]One HUD study estimates that modernization needs of public housing are nearly $20,000 per unit. If these needs were met, the ongoing annual accrual needs of public housing are estimated at almost $1,700 per unit. See *Capital Needs of the Public Housing Stock in 1998*, Abt and Associates Inc. (2000). However, given the unique nature of public housing, its history may not shed much light on the future of other current programs. Perhaps more relevant, another HUD study estimates that the annual accrual needs of FHA-insured multifamily properties are almost $1,100 per unit. See *Status of HUD-Insured (or Held) Multifamily Rental Housing in 1995*, Abt Associates, Inc. (1999).

[22]This percentage represents an increase of $35,220 to the total 30-year cost of $223,190 for the HOPE VI program. Our estimate of this increase is based on the national average property tax rate of $11 per $1,000 in property value, according to the 1999 *American Housing Survey*, and an annual set-aside of $600 per unit. About 25 percent of this increase is attributable to shortfalls in capital reserves and 75 percent to property tax abatements. Interviews with industry officials indicate that annual set-asides for new construction under the tax credit program are about $300 per unit. HUD officials, on the other hand, argue that the history of public housing and other federal multifamily housing programs suggests that a set-aside of about $1,000 per unit is more appropriate. When an annual shortfall of $300 per unit is assumed and no changes are made to the property tax abatement estimates, our total 30-year cost estimate increases by 14 percent. When $1,000 per unit is assumed, our total 30-year cost estimate increases by 18 percent.

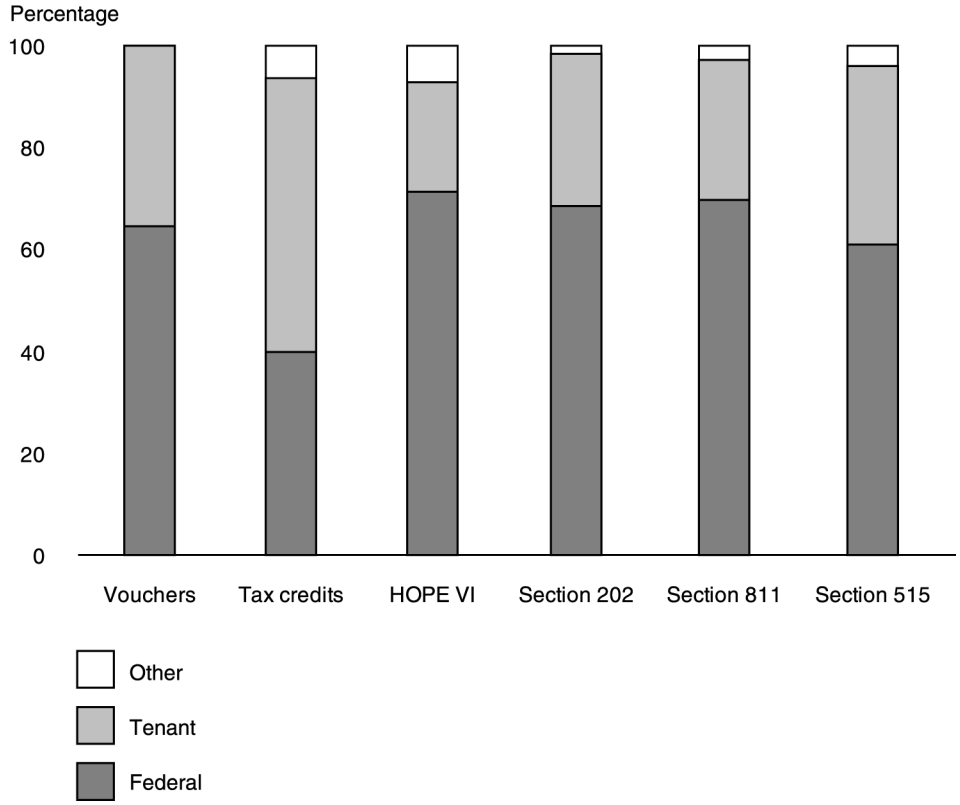
The Federal Government and Tenants Pay the Largest Shares of Total Costs

Across the six active programs, the federal government and tenants pay the majority of the programs' average total costs. For all of the programs except tax credits, the federal government pays the largest percentage of the average total costs. For tax credits, the tenants pay a slightly higher percentage, but they have higher incomes, on average, and pay a larger percentage of their income for rent than other assisted households. If the incomes and rent burdens of voucher households equaled those for each of the production programs, the federal government would pay more for one- and two-bedroom units under the production programs than under the voucher program. Contributions from state, local, and private sources are, on average, small as a percentage of total costs, but in certain locations, contributions from these sources can reduce rents paid by the tenants and the federal cost of rental assistance.

The Federal Government and Tenants Pay Most of the Total Costs of Assisted Housing

The federal government pays most of the total costs for all of the programs with the exception of tax credits, for which tenants pay the largest share of total costs. As figure 8 shows, the federal share, as a percentage of average total costs, is about 65 percent for vouchers; 60 percent for Section 515; and 70 percent for HOPE VI, Section 202, and Section 811. The federal share is the smallest for tax credits—about 40 percent.

Figure 8: Average Shares of Total 30-Year Costs for One-Bedroom Units Paid by the Federal Government, Tenants, and Others



Notes:

1. The cost shares for HOPE VI are for all units, not one-bedroom units, because the program does not identify costs by the number of bedrooms.

2. This figure presents data on average cost shares for the nation, which are similar to those for metropolitan and nonmetropolitan areas.

3. "Other" includes state, local, and private funding sources.

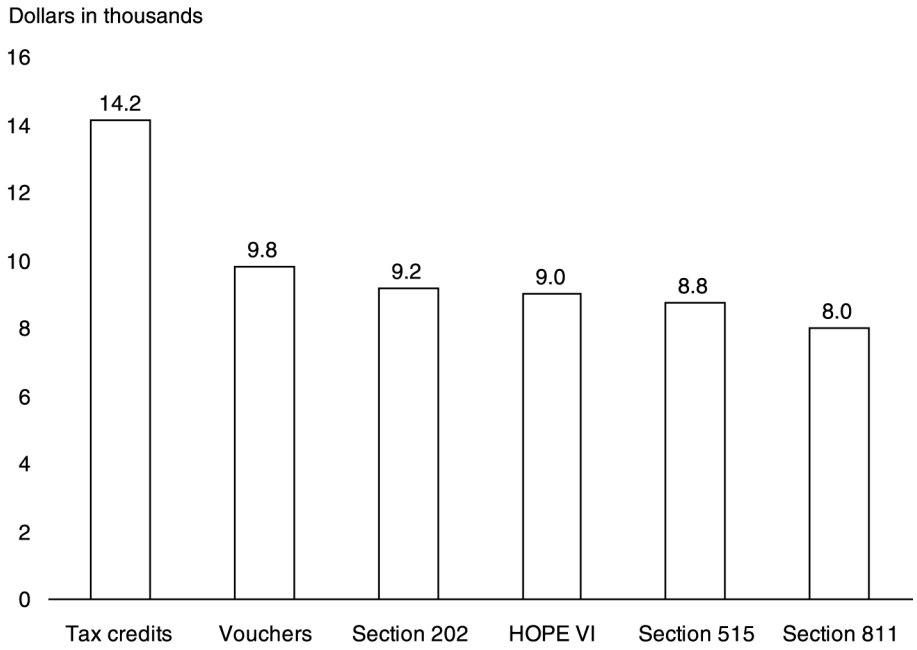
As figure 8 shows, tenants contribute between 21 percent (HOPE VI) and 54 percent (tax credits) of the total housing costs over 30 years. The tenant share for each of the programs is dependent on the average income of the households served and the average portion of this income paid for rent. The more the assisted households pay, the less the federal government needs to contribute.

As figure 9 shows, compared with the other programs, tax credit households have the largest average income, about $14,150 (in 1999 dollars),[23] and pay the largest portion of their income for rent—about 35 percent overall—compared with about 30 percent for most of the households assisted through the other programs.[24] As a result, the tenant share of total cost is the largest for the tax credit program. The other active housing programs target households with lower average incomes, and, therefore, tenants under these programs pay a smaller share of the average total per-unit costs. Most of these households receive rental assistance and pay about 30 percent of their income for rent, leaving the federal government and, to a far lesser extent, other subsidy providers to cover the remaining costs. Figure 9 displays the average incomes of the households assisted through the six active programs.

[23]The tax credit program serves two distinct groups. The first group, which we estimate includes about 40 percent of tax credit households, has an average income of $8,350 (in 1999 dollars), comparable to the average incomes of households assisted through the other active programs. This group receives rental assistance and pays about 30 percent of its income for rent. The second group, on the other hand, has a larger average income of $17,750, does not receive rental assistance, and faces much higher rent burdens, sometimes exceeding 50 percent of its income. (See GAO/GGD/RCED-97-55, p. 41.)

[24]According to our most recent letter on tax credits, *Tax Credits: Characteristics of Tax Credit Properties and Their Residents* (GAO/RCED-00-51R, Jan. 10, 2000, pp. 6 and 7), about 57 percent of tax credit households paid 30 percent or less of their income for rent, about 21 percent paid between 31 and 40 percent, about 8 percent paid between 41 and 50 percent, about 8 percent paid over 50 percent, and 5 percent paid an unknown percentage.

Figure 9: Average Annual Incomes of Households Served Under the Six Active Programs



Sources: GAO's analysis of data from HUD's Multifamily Tenant Characteristics System and *A Picture of Subsidized Households*, RHS agency officials, and GAO/GGD/RCED-97-55.

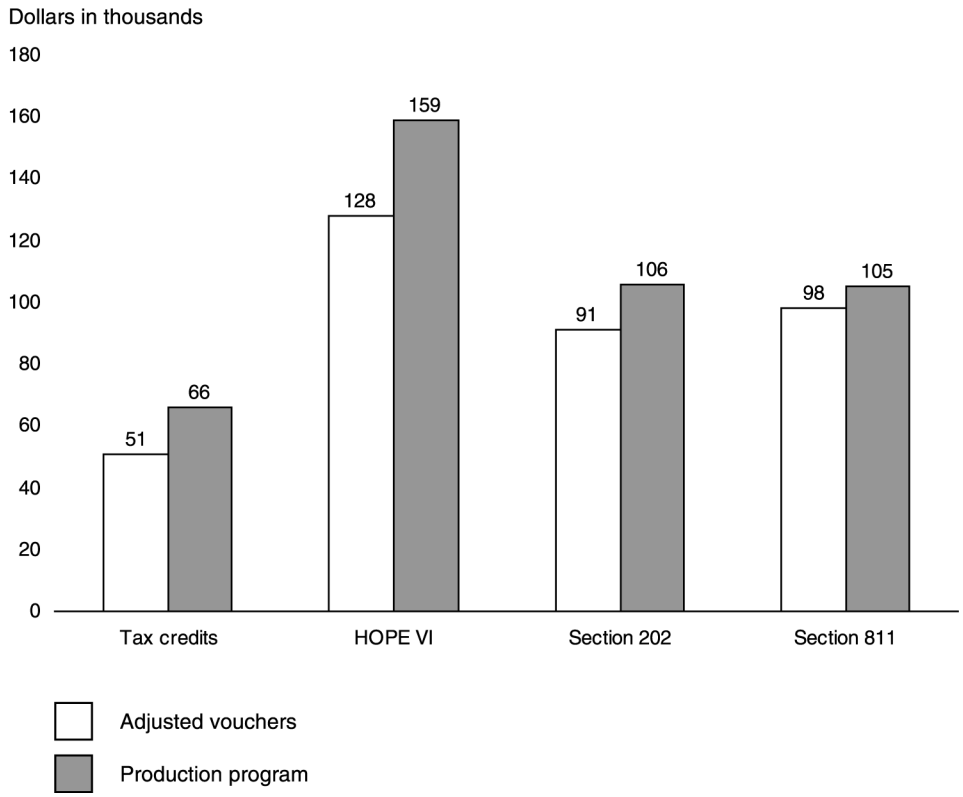
After Adjustments, the Federal Cost of the Production Programs Is Greater Than Vouchers

If the average incomes of tax credit and voucher households were equal[25] and if both groups of tenants paid the same percentage of their income for rent, it would cost the federal government about 30 percent more for the tax credit program than for housing vouchers for a one-bedroom unit in metropolitan areas (fig. 10). Similarly, if the average incomes of the other production programs and voucher households were equal and if both groups of tenants paid the same percentage of their income for rent, it would cost the federal government, in metropolitan areas, from 7 percent more for Section 811 to 16 percent more for Section 202 for one-bedroom units over 30 years. For two-bedroom units, it costs the federal government, in metropolitan areas, 2 percent more for Section 811 and 15 percent more for tax credits. The federal cost of an average-size HOPE VI unit (2.4 bedrooms) is 24 percent more than vouchers, and if all costs, in addition to housing-related expenses, were considered, the federal cost of HOPE VI would be 43 percent more.[26] We also estimated the federal cost of three-bedroom units, where data were available, and found that tax credit units in metropolitan areas cost the federal government 3 percent less than vouchers.

[25]Since differences in household incomes and rent burdens can have a significant impact on federal costs, we adjusted the rent paid by the voucher household to equal the rent paid by the tax credit household. We also made similar adjustments for the comparisons between vouchers and the other production programs.

[26]Because data for the HOPE VI program were not available by unit size, we followed the approach used in our interim report to estimate the program's federal cost. For the other programs, we were able to compare cost across different unit sizes.

Figure 10: Comparison of the Average Federal Cost of One-Bedroom Units in Metropolitan Areas for Production Programs and Vouchers, Adjusted for Household Income and Rent Burden

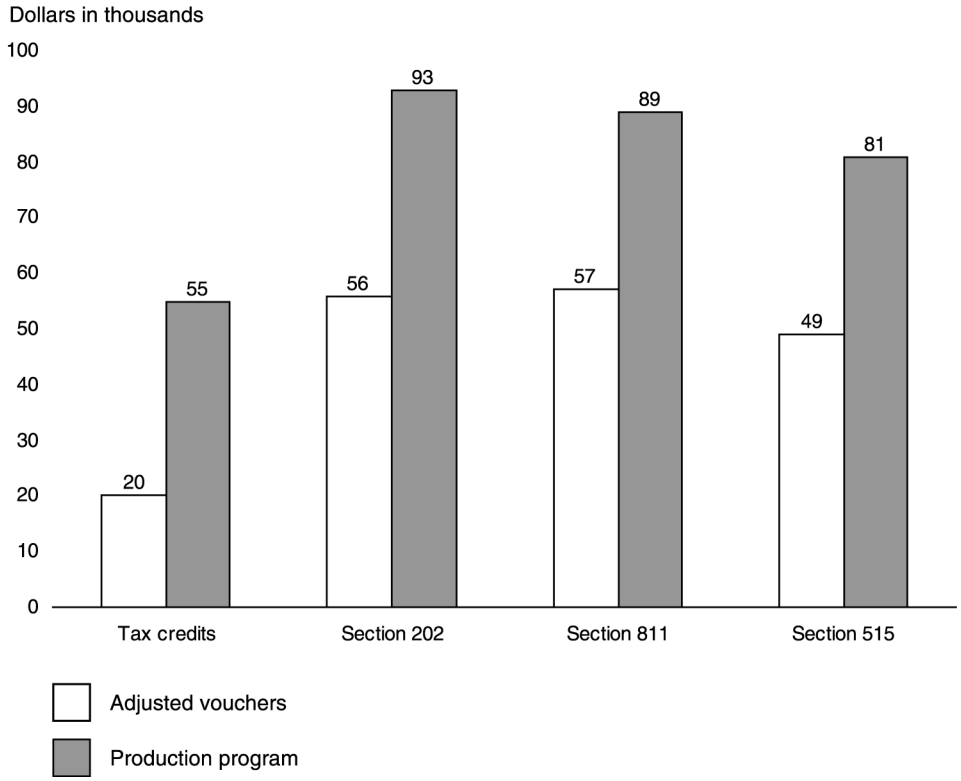


Note: Since Section 515 properties are located in rural areas, they are not included in this figure. Due to data limitations, HOPE VI cost data reflect the average for all units, not one-bedroom units. Also, it is not appropriate to compare across production programs because the assumed tenant rental contribution for housing vouchers is different for each of the production programs.

As shown in figure 11, in nonmetropolitan areas, the differences in the comparative federal cost of vouchers and production programs are greater. For example, the federal cost of one-bedroom tax credit units is about 180 percent more than the federal cost of vouchers in nonmetropolitan areas, compared with about 30 percent more in metropolitan areas. The federal costs for the other production programs are from 57 percent (Section 811) to 67 percent (Section 202) greater than for vouchers in nonmetropolitan areas. For two-bedroom units, it costs the federal government, in nonmetropolitan areas, 103 percent more for tax credits. For the other programs, the federal costs in nonmetropolitan areas are 28 percent greater

for Section 515 and 39 percent greater for Section 811. Finally, the federal cost of three-bedroom tax credit units in nonmetropolitan areas is 102 percent more than vouchers. Additional data on the federal costs of one- and two-bedroom units appear in tables 12 and 13 in appendix I.

Figure 11: Comparison of the Average Federal Cost of One-Bedroom Units in Nonmetropolitan Areas for Production Programs and Vouchers, Adjusted for Household Income and Rent Burden



Note: Since HOPE VI properties are located exclusively in metro areas, they are not included in this figure. Also, it is not appropriate to compare across production programs because the assumed tenant rental contribution for housing vouchers is different for each of the production programs.

Contributions From Other Sources, While Generally Small, Can Reduce Rents or Lower Federal Costs

Contributions from state, local, and private sources, as shown in figure 8, cover a small share of the total costs of the production programs.[27] At the national level, these contributions do not exceed, on average, 7 percent over 30 years. This percentage, however, would be somewhat higher if data were available to account for the impact of property tax abatements, as previously discussed in this report.

Even though the share of total costs paid by these sources is, on average, small, we identified state and local subsidies that, in certain locations, had a significant impact on rents or federal costs. For example, a comparison of the subsidies provided to properties in the New York and Boston metropolitan areas demonstrates the impact of a significant nonfederal subsidy. As shown in table 1, the average contribution from state, local, and private sources for a two-bedroom tax credit unit is over five times greater in New York than in Boston in the first year. At the same time, both the total and federal per-unit costs were about the same for both cities. Because of the difference in subsidies from state, local, and private sources, the average monthly rent paid by a tax credit household was about $820 in Boston and about $430 in New York—a difference of nearly 90 percent. The primary reason for the difference in tax credit rents is that New York City provides virtually all of the mortgages for tax credit properties, at rates averaging about 1 percent—a very significant subsidy. Conversely, in the Boston metropolitan area, the state provides about two-thirds of the mortgages at interest rates that are very close to market rates. In addition, rent reductions resulting from state and local subsidies present opportunities to decrease the federal cost of providing rental assistance to these units.

[27]These contributions are not applicable to the voucher program.

Table 1: Impact of Contributions From State, Local, and Private Sources on the Average First-Year Costs of Two-Bedroom Units for Tax Credit Properties in Boston and New York

Location	Federal	State, local, and private	Tenant	Total
Boston	$5,990	$740	$7,540	$14,270
New York	6,040	4,250	4,010	14,300

Note: To illustrate clearly the impact of these subsidies on the resulting rents, we chose to present the average total costs in the first year, rather than over 30 years. Also, the tenant shares of costs for both Boston and New York are less than the average annual rents charged for the units because the tenant shares do not include the estimated rental assistance payments paid by the federal government.

After Adjustments, the Total Government Cost of the Production Programs Is Greater Than Vouchers

Our data also allow us to compare the total government (federal, state, and local) cost of production programs and vouchers, while making the same assumptions concerning household income and rent burdens as in the federal cost comparisons.[28] In metro areas, the total government costs for a one-bedroom unit under the production programs, compared with vouchers, are 12 percent more for Section 811, 20 percent more for Section 202, and 53 percent more for tax credits. The total government cost for an average-size unit under HOPE VI is 37 percent more. In nonmetropolitan areas, the total government costs for a one-bedroom unit under the production programs, compared with vouchers, are 60 percent more for Section 811, 67 percent more for Section 202, 75 percent more for Section 515, and 214 percent more for tax credits. The differentials in total government costs are similar for two-bedroom units.

Housing Policy Issues

The overriding goal of the federal housing programs we reviewed is to house the poor. However, the housing programs have additional goals—vouchers provide mobility and neighborhood choice, and production programs have additional goals, from creating new affordable units, to meeting the needs of the elderly or persons with disabilities, to promoting community development. Whether the benefits derived from these additional goals justify the programs' additional costs is a major housing policy question. For all of the programs, controlling costs is important to

[28]Our estimate of total government cost may include private subsidies. However, these subsidies generally make up a very small fraction of the total cost of the programs.

ensure the efficient use of federal subsidies. Increasing contributions from nonfederal sources could stretch federal housing dollars for the production programs, and further research might suggest opportunities for containing development costs. Cost control strategies must include the potential costs to the federal government of setting aside sufficient funding for capital reserves. Assessing the extent to which the programs are collectively addressing the nation's affordable housing needs and controlling costs is difficult because detailed data on the various housing programs are not consistently available.

Achieving the Goals of Federal Housing Policy

If costs were the only consideration, our estimates would suggest that the production programs should be replaced with vouchers. However, federal housing programs deliver benefits that must be taken into account when addressing costs. Voucher recipients can choose housing in neighborhoods that offer better educational and employment opportunities, or they can also choose to remain in place while paying less for rent. In many markets, production programs are the only sources of new affordable rental units, and use restrictions will keep these units affordable for decades to come, limiting the impact of market forces. These units can be crucial, especially when housing markets are tight or landlords are unwilling to rent to voucher recipients. Certain housing authorities have found that the fair market rents in some metropolitan areas are too low, making it difficult for voucher recipients to find housing.[29]

[29]Comprehensive and current data on success rates for the nation were not available. HUD is completing *The Voucher Success Rates* study based on sample data from 48 metropolitan public housing authorities. Anecdotal evidence, while not conclusive, points to the difficulty of finding housing with vouchers. A search of the NEXIS database found over 70 news articles published over the past year about the challenges faced by voucher recipients. We found references to this problem reported for certain high-cost areas, such as Boston and San Francisco, and also for certain low-cost areas, such as Little Rock, Ark. For example, see "Many Housing Vouchers Forfeited: Lack of Affordable Units Undermining Section 8," *The Boston Globe*, Mar. 24, 2001; "Desperate Clutch for Subsidized Shelter; S.F. Applicants in Frenzy," *The San Francisco Chronicle*, Sept. 5, 2001; and "Project Tenants to Enter Tight Housing Market," *Arkansas Democrat-Gazette*, Feb. 18, 2001.

In addition, there are substantial differences in the housing and services provided under each of the production programs that must also be considered. For example, the Section 202 and Section 811 programs make available services that are not readily found in affordable housing in the private rental market. These services can be particularly important for frail elderly residents or persons with disabilities, for whom housing vouchers are probably not a reasonable alternative. As the nation's population ages, production programs for the elderly may become an even more important part of national housing policy. Finally, in many urban areas, the production programs have formed an integral part of an overall community development strategy, as in the case of the HOPE VI program. As a matter of public policy, the benefits of mobility, increasing the supply of affordable units,[30] providing additional services for special needs populations, or revitalizing distressed communities must be weighed against the costs of these efforts.

Controlling Federal Costs

Opportunities to control the federal cost of housing assistance are limited. Shifting more of the cost to very-low-income households would not be practical, given that the federal government and tenants cover the majority of costs for all programs and very-low-income tenants can contribute only a very small portion of the total cost. Without contributions from other sources, the federal cost share inevitably increases as tenant income declines. Thus, the bottom line is that housing very poor households is expensive for the federal government under all programs. To shift more of the cost burden to tenants, the programs would have to serve higher income households.

In some instances, increasing contributions from state and local sources may be an option for limiting federal expenditures for some of the production programs, as our discussion of New York City's mortgage interest subsidy indicated. Substantial subsidies from these sources could eliminate or reduce the need for federal rental assistance, freeing federal funds to assist other households. However, state and local governments

[30]A 1999 study measured the impact of production program subsidies on the supply of housing. It found that, with the exception of public housing, these subsidy programs most likely add little or nothing to the total housing stock because they were simply displacing private, unsubsidized construction. The study concluded that public housing has steadily added to the housing stock since its inception. See Michael P. Murray, "Subsidized and Unsubsidized Housing Stocks 1935 to 1987: Crowding Out and Cointegration," *Journal of Real Estate Finance and Economics*, Vol. 18 (Jan. 1999).

vary in their ability and willingness to support affordable housing. Federal incentives, such as additional tax credit or grant awards for major financial commitments, might promote greater nonfederal participation.

Further research on projects' adherence to cost-containment guidelines could identify opportunities for controlling development costs. Our data on the production programs show wide variation in the costs of projects under the same program in the same metropolitan area. While the higher costs of some units reflect the cost differential between new construction and rehabilitation or the premiums paid for special features, the reasons for the higher costs of other units are less obvious. Understanding the considerable variation in per-unit costs requires more work on the determinants of development costs and the effectiveness of current cost-containment guidelines. To the extent that a property's development costs can be contained and a production program's objectives still achieved, federal dollars can go further.

Further research on the adequacy of the production programs' capital replacement reserves would put the federal government in a better position to manage potential long-term cost risks. As we previously noted, the production programs could pose a cost risk to the federal government if capital reserves are underfunded. The experience with modernization programs for public housing and other production programs suggests that this cost risk can be large. It is still too early to tell whether tax credit properties will suffer from capital shortfalls as they age. However, even if they do suffer, the structure of the tax credit program may limit the risk to the federal government. The government does not own the units or hold the mortgages on most of them. As a result, the potential role of the federal government is unclear if these units were to need an infusion of capital. It is possible that, as the ownership of tax credit properties changes over time, new owners will apply for tax credits to rehabilitate the properties, but their applications will have to be assessed by the relevant state agencies, which will have no statutory obligation to provide the credits.

Availability of Housing Cost Data

Our analysis for this report, which required detailed, consistent data on housing characteristics, services, and costs for the six active programs, relied on information collected and centralized by HUD and RHS but was hampered by gaps in the data for some programs. For example, HUD's centralized data on the Section 202 and Section 811 programs do not include information on the sources of funds other than the capital advance. For the HOPE VI program, data were available on total costs and on HUD's portion of the total costs, but information on tax credits and state, local, and private funds was limited.[31] To varying degrees, HUD and RHS have data on tenant characteristics and on property revenues and expenses. Cooperation and coordination across federal agencies to establish standards for collecting data on housing programs would facilitate the development of information to further our understanding of federal housing programs.

For the tax credit program, no federal agency is responsible for collecting and centralizing data from the state and local housing finance agencies that administer the program. While IRS oversees compliance with the federal regulations for using tax credits, it does not oversee the program's impact on national housing policy, including its relationship to other federal housing programs. Recognizing the importance of the tax credit program, HUD established a limited national database on tax credit properties. This database has information, which the housing finance agencies have voluntarily reported to HUD, on the properties placed in service through 1998, including their location, number of units, number of bedrooms per unit, type of construction (new or rehabilitated), and type of sponsor (nonprofit or for-profit). However, HUD's database does not include information on tenant characteristics, project costs, and property operating revenues and expenses. These data, though generally available from the housing finance agencies, have not been centralized, making analysis and evaluation of the program difficult. As a result, for this report, we relied on a database constructed by a private research firm.

Given the size of the tax credit program—soon to exceed $4 billion per year—it is important to monitor and evaluate the program's impact on national housing policy. However, no federal agency has been designated to perform this role, and no requirements have been established for state

[31]HOPE VI program officials, however, are revising their data collection procedures to provide more details on all sources of funds.

finance agencies to report data on project costs and households served. Accordingly, there is a need for a national, centralized database on the tax credit program to serve as the basis for evaluating the program's success in serving various populations, assessing how federal funds are being used, determining to what extent other sources of funding are being leveraged, gauging projects' compliance with cost-containment guidelines, and monitoring projects' ongoing and long-term financial viability. To develop this database, a federal agency would have to be explicitly designated as responsible for collecting the information and establishing reporting requirements for the housing finance agencies that manage the program. The costs and benefits of designating such an agency and requiring more detailed reporting by the housing finance agencies would have to be weighed before any action could be taken.

Federal Agency and State Association Comments and Our Evaluation

We provided HUD, USDA, and the National Council of State Housing Agencies (NCSHA)[32] with a draft of this report for their review and comment. HUD commended us for our effort in collecting data from various sources to address the "critical question" concerning the relative costs of federal rental housing programs. HUD's primary concern was that it believes our 30-year cost estimates understate the costs of the production programs because the history of previous production efforts suggests that capital reserves for future replacements and improvements are often underfunded and, as a result, substantial amounts of additional subsidies may be necessary in later years. We agree in part. While past production programs have received additional subsidies to maintain their properties in satisfactory condition, the extent to which newer programs, such as tax credits and the capital advance programs under Section 202 and Section 811, will require additional subsidies to maintain the properties is currently unknown. To address these concerns, we include additional information on the impact of different amounts of capital reserve shortfalls on our 30-year cost estimates. HUD recommended that we shorten our life-cycle cost period to 15 years to reduce the uncertainties concerning these additional future subsidies. We did not, however, shorten our cost period because development subsidies are intended to buy low-income housing for more

[32]NCSHA is a national nonprofit organization created in 1970 to assist state housing agencies in advancing the interest of low-income people through the financing, development, and preservation of affordable housing. NCSHA's members operate in every state and the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.

than 15 years; most production programs today require that housing remain affordable for at least 30 years.

HUD was also concerned that the title of the report, as well as certain parts of the draft, suggested that production programs respond to broader objectives than the voucher program. HUD believes that vouchers provide benefits in addition to affordable housing, including mobility. We have changed the title of the report and, where appropriate, added discussions about the additional benefits derived from vouchers. The complete text of HUD's comments and our response are included in appendix V. HUD also provided us with technical comments, which we incorporated into the report, as appropriate.

USDA generally agreed with our comparison of costs across programs and stated that further research is needed on the adequacy of production programs' capital replacement reserves in order to address long-term federal cost risks. In addition, USDA stated that cooperation and coordination across federal agencies is needed to establish standards for collecting data on housing programs. According to USDA, standardized reporting format would greatly reduce the complexity and cost of compliance for owners, property managers, and government agencies. The complete text of USDA's comments and our response are included in appendix VI.

NCSHA commented that, in its opinion, comparing costs across programs, and especially comparing the costs of production programs and housing vouchers, is not useful. We disagree. While it is true that each program has some unique objectives, fundamentally, housing vouchers and housing production programs share a core objective of providing housing for low- and very-low-income households. In addition, since housing subsidies are not an entitlement and only about one-third of eligible households receive assistance, it is imperative that scarce subsidies dollars be used as efficiently as possible. NCSHA's comments suggest that it believes that the unmeasured benefits of the tax credit program exceed those of vouchers and should eliminate the gap between the costs of vouchers and of tax credit units. However, NCSHA provides no support for this view. The work presented in our report provides a starting point for assessing the relative costs of housing assistance programs. The cost differentials we present provide an estimate of how large the additional benefits would have to be to justify the additional costs. As HUD points out in its comments, future work should focus on measuring these additional benefits to provide a fuller picture of the relative costs of these housing assistance programs.

NCSHA questioned the need for a national database on costs for the tax credit program, arguing that the tax credit is one of the most exhaustively studied programs. We disagree. There are very few studies of the tax credit program that assess the costs of providing housing under the program, the financial viability of tax credit projects over time, or the households served by the program because such analysis requires an exhausting data collection effort. For the two most detailed studies on the national costs of tax credits—ours (1997) and that of Cummings and DiPasquale (1999), data collection from a variety of disparate sources took well over a year. Cummings and DiPasquale have the most recent cost information, and their data end in 1996. Our 1997 study provides the only description of the characteristics of tenants in tax credit developments for the nation, and our data are only for developments placed in service between 1992 and 1994. Michael A. Stegman, in a 1999 review, argued that we know very little about the tax credit program.[33] He noted that estimates vary on even very basic facts, such as how many units have been developed. The tax credit program consumes real taxpayer resources, and as with any government program, taxpayers deserve to know what is being purchased with their dollars and at what cost. The complete text of NCSHA's comments and our response are included in appendix VII.

Scope and Methodology

To accomplish our objectives, we collected and analyzed data on housing costs and characteristics and tenant income for the nation as a whole and for seven metropolitan areas—Baltimore, Boston, Chicago, Dallas/Fort Worth, Denver, Los Angeles, and New York. These locations are geographically diverse and representative of both low-cost and high-cost housing markets. We obtained the data for our analysis from a variety of sources, including HUD, RHS, the Bureau of the Census, public housing authorities, state housing finance agencies, property managers, industry groups, and previous studies on tax credits.[34] We also visited representative properties in three of the seven metropolitan areas to observe qualitative differences in the housing and services provided under each of the programs.

[33]Michael A. Stegman, "Comment on Jean L. Cummings and Denise DiPasquale's 'The Low-Income Housing Tax Credit: An Analysis of the First Ten Years': Lifting the Veil of Ignorance," *Housing Policy Debate*, Vol. 10, Issue 2 (1999).

[34]GAO/GGD/RCED-97-55, and *Building Affordable Housing: An Analysis of the Low-Income Housing Tax Credit*, City Research (Boston: 1998).

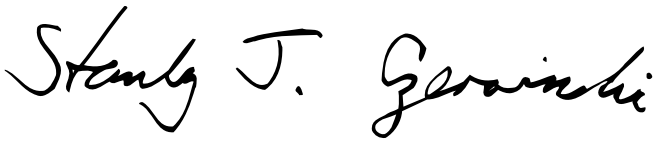
To estimate the cost of each of the six active housing programs, we developed a 30-year (life-cycle) cost estimate. We chose 30 years for our life-cycle estimates because this period is generally the minimal length of time that properties developed through federal housing programs can be expected to serve low-income households. We presented our cost estimates, as applicable, for metropolitan and nonmetropolitan areas to illustrate the impact of location on cost. To account for differences in unit size, we determined the cost of one-, two-, and three-bedroom units for each of the programs, where possible. This approach enabled us to compare costs across programs for units of the same size.

To compute the portion of each program's cost paid by the federal government, tenants, and others, we identified the amounts in rents and development subsidies paid by these sources. In comparing the relative federal cost of production programs and vouchers, we made adjustments to account for differences among the programs in tenants' rental contributions, which affect the size of the federal rental assistance subsidy. As we did for total costs, we accounted for differences in unit size by determining the cost of one-, two-, and three-bedroom units, where possible. Our methodology is described further in appendix I.

We performed our work from September 1999 through November 2001 in accordance with generally accepted government accounting standards.

As arranged with your offices, we will send copies of this report to interested congressional committees and Members of Congress; the Secretary of Agriculture; the Secretary of Housing and Urban Development; the Director, Office of Management and Budget; the Executive Director, Millennial Housing Commission; and other interested parties. We will also make copies available to others on request.

If you have any questions about this report, please contact me at (202) 512-7631. Key contributors to this report are listed in appendix VIII.



Stanley J. Czerwinski
Director, Physical Infrastructure Issues

List of Congressional Committees

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Chairman
The Honorable Wayne Allard
Ranking Minority Member
Subcommittee on Housing
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Committee on Banking, Housing,
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United States Senate

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Committee on Appropriations
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Subcommittee on Housing and Community Opportunity
Committee on Financial Services
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Subcommittee on VA, HUD, and Independent Agencies
Committee on Appropriations
House of Representatives

Methodology for Estimating Per-Unit Costs of Federally Assisted Housing Programs

A key objective of this report is to compare the total costs of providing housing to low- and very-low-income households under the six active federal housing programs. Previous studies on the relative costs of housing programs have generally found that vouchers are less expensive and more cost-effective than production programs. However, most of these studies are over 20 years old, and, as a result, they do not provide information on the newer active housing programs. Valid cost comparisons require that we compare the costs of providing similar units in similar locations. In addition, the structure of the subsidies provided under the programs varies in ways that significantly affect cost comparisons. Vouchers are short-term commitments to provide housing assistance, while production programs provide units with certain restrictions to ensure that the units will remain affordable in the future, often over 30 years. To account for differences in the timing of investments under the various programs, we estimated their 30-year life-cycle costs.[35] Once we determined the cost of each program, we identified how these costs are shared by the federal government, assisted households, and other sources—state, local, and private entities. Finally, the available cost data varied considerably across the six programs, requiring us to piece together data from many different public and private sources.

Previous Studies

The role of production programs has been a central issue in major national housing policy reviews of the last four decades—the Kaiser Committee in 1968, the President's Commission on Housing in 1982, and the National Housing Task Force of 1988. The focus of these reviews shifted from increasing the physical quality of the housing stock in the Kaiser Committee, to increasing housing affordability in the President's Commission on Housing, to addressing housing availability and affordability in the National Housing Task Force.[36] Since the early 1980s, vouchers have been the centerpiece of federal housing assistance. With the

[35]Life-cycle cost is the total cost of owning, operating, and maintaining a property over its useful life. In this analysis, we assume a useful life of 30 years. Also, for the purposes of comparison, we provide in this appendix detailed data on the first-year costs, which appeared in our July 2001 interim report. The total first-year cost is the rent paid in the first year plus the annualized present value of all development subsidies, paid over 30 years at the government discount rate of 6 percent.

[36]Langley C. Keyes and Denise DiPasquale, " Housing Policies for the 1990s," in *Building Foundations: Housing and Federal Policy*, ed. Denise DiPasquale and Langley C. Keyes (University of Pennsylvania Press, 1990).

HOPE VI program and the creation and extension of the Low-Income Housing Tax Credit program, the debate concerning the role of production programs has continued. In his review of the cost effectiveness of alternative housing assistance programs, William C. Apgar argues that there is a role for production programs in housing policy, concluding that "economic theory and recent empirical evidence suggest that [vouchers] are not best at all times and under all situations."[37]

In a comprehensive 2001 review of federal housing programs, Edgar O. Olsen argues that the cost-effectiveness of alternative approaches in assisting low-income households must be considered if the federal government is to assist as many households as possible.[38] Measuring cost-effectiveness involves comparing the total cost of providing the assisted housing and its estimated market rent. The study reviews the housing cost literature and finds that these studies unanimously conclude that the cost of production programs, such as Public Housing, Section 8 New Construction, and Section 236, exceeds their market value. Those studies that looked at vouchers found that voucher rents were very close to their market rents. According to Olsen, the estimates in these studies probably understate the inefficiency of construction programs relative to housing vouchers because, among other things, all indirect subsidies are not fully included, such as the value of donated land and property tax exemptions or abatements. The review finds that the small number of studies on the cost-effectiveness of housing programs is not conclusive in establishing whether subsidized new construction is needed in localities with the lowest vacancy rates. The review concludes, "whether there are any market conditions under which construction programs are more cost-effective than vouchers is surely one of the most important unanswered questions in housing policy analysis."

For the most part, the housing programs evaluated in the studies reviewed by Olsen are no longer active. While we can still learn a great deal from this work, the current active housing programs have features that distinguish them from earlier programs. Most of the research done on the costs of these programs is over 20 years old. Some of the most detailed analyses

[37]William C. Apgar, "Which Housing Policy is Best?" *Housing Policy Debate*, Vol. 1, Issue 1 (1990).

[38]Edgar O. Olsen, "The Cost-Effectiveness of Alternative Methods of Delivering Housing Subsidies," *Thomas Jefferson Center for Political Economy, Working Paper 351* (Dec. 2000), available at http://www.virginia.edu/~econ/TJpapersx.htm.

are based on the housing experiments of the 1970s, and we have not had anything close to the quality and depth of those data.

Conceptual Framework

We started our analysis by constructing the total costs of a unit under each program, regardless of who bears the costs. As discussed in this report, in the private rental housing market, rents cover the total costs of providing a housing unit. The total costs include operating expenses (e.g., administrative expenses, utilities, routine maintenance, and property taxes); debt service; deposits to a replacement reserve for major capital improvements over time; and a market return to equity investors. We defined the total costs of vouchers as the sum of the total rent paid by both the federal government and the assisted household and the fee paid by the Department of Housing and Urban Development (HUD) to the local housing authority to administer the program:

Total Costs = Rents + Administrative Fee

For production programs, costs are more complicated because an asset with a long useful life is produced. In the private housing market, the value of the housing equals the present discounted value (PDV) of the net rental income stream over the useful life:

Value = PDV(Net Rental Income)

The rental income stream must cover the total costs:[39]

PDV(Rental Income) = Total Costs = Total Development Costs + PDV(Operating Costs)

In the private market, if the present discounted value of market rents does not cover total costs, the housing development will not be built. Federal

[39]We did not include the costs incurred by federal agencies (HUD, the Rural Housing Service, and the Internal Revenue Service) to administer and monitor the programs, since these costs are not identified in sufficient detail in the agencies' records. However, we believe these costs to be extremely small relative to those costs that we have accounted for. In addition, we did not include the cost to the government in forgone taxes due to depreciation because the rationale for the depreciation deduction in tax law is to permit investors to realize the real costs associated with a structure's wearing out over time. However, to the extent that a building's tax life (27.5 years) is generally shorter than its economic life, some portion of the depreciation benefit may be viewed as a subsidy.

production programs generally provide housing at below-market rents or provide housing in locations where market rents would be insufficient to cover costs. In either case, the difference between total rents paid and total costs is covered by development subsidies. Therefore, for production programs, the relationship is as follows:

Total Production Program Costs = PDV(Rental Income) + PDV(Development Subsidies)

Estimating Program Costs

Table 2 presents the average total development costs per unit for the productions programs by general location and for seven metropolitan areas. Information on housing vouchers does not appear in the table because the program relies on existing housing. Nationally and in most metropolitan areas, the total development costs are considerably higher for HOPE VI than for the other production programs. The HOPE VI figures for most of our seven metropolitan areas incorporate data for only two developments. As a result, the average for a particular metropolitan area can be skewed by the presence of large projects with high or low development costs. In the New York metropolitan area, for example, one very large HOPE VI development involved rehabilitation, which can cost much less than new construction, and, consequently, the average HOPE VI development cost for New York is unusually low. At the same time, three HOPE VI properties in the Baltimore metropolitan area involving new construction had development costs very similar to each other.

Table 2: Average Total Development Costs Per Unit, by General Location and for Seven Metropolitan Areas, in 1999 Dollars

		HOPE VI[a]				
Location	Tax credits	Housing-related costs	All costs	Section 202	Section 811	Section 515
Nation	$73,590	$117,920	$143,450	$73,510	$70,430	$58,280
Metro	75,690	117,920	143,450	75,430	73,020	[b]
Nonmetro	62,010	[b]	[b]	60,270	63,120	58,280
Seven metro areas						
Baltimore	77,360	166,380	221,210	80,250	69,420	[b]
Boston	116,710	197,000	261,610	94,160	96,000	[b]
Chicago	79,340	102,470	108,950	75,020	71,370	[b]
Dallas/Fort Worth	60,100	78,920	96,460	52,390	66,710	[b]
Denver	72,650	102,170	126,440	72,160	74,640	[b]
Los Angeles	104,750	113,060	154,310	94,360	97,520	[b]
New York	111,580	76,710	107,010	101,730	116,180	[b]

[a]The total development costs for HOPE VI reflect mostly planned figures. Housing-related costs exclude the costs of remediation, demolition, the construction of housing and community facilities, relocation, and community-based planning and participation, most of which are not applicable to the other housing programs. These other expenses are included, along with the housing-related expenses, in the "All costs" column.

[b]Since Section 515 primarily serves nonmetropolitan areas, we do not show Section 515 data for metropolitan areas. Also, since HOPE VI exclusively serves metropolitan areas, we do not show HOPE VI data for nonmetropolitan areas.

For some programs, the entire development cost is subsidized with up-front grants, while for others, it is subsidized over time with tax credits or below-market loans. Table 3 presents our estimates of the present discounted value of the average development subsidies per unit in 1999 for the five production programs we reviewed, both for the nation and for seven metropolitan areas. For HOPE VI, Section 202, and Section 811, the federal government pays the total development costs up front with grants; as a result, the development subsidies are equal to the total development costs. Section 515 provides below-market fixed-rate loans of 1 percent with 50-year terms. To estimate the subsidy provided through a below-market interest-rate loan, we compared the rate on the loan with the rate on 30-year constant maturity treasuries (CMT)—which is a very conservative indicator of market interest rates. We estimated the value of the subsidy by taking the spread between the 30-year CMT and the actual interest on the loan and by calculating the forgone interest over the life of the loan. We took the present discounted value for the flow of interest

subsidies over 30 years. We assumed a discount rate of 6 percent, representing the government cost of funds according to data published by the Office of Management and Budget. We assumed the project would be sold in year 30. For tax credits, the federal government provides investors with a flow of tax credits over 10 years. In addition, state and local governments or private entities may provide grants or below-market loans. For tax credits, the present discounted value of the development subsidies is the sum of (1) the present discounted value of the flow of the tax credits, (2) any grants provided, and (3) the present discounted value of the flow of the interest subsidies on any below-market loans.[40]

Table 3: Average Present Discounted Value of Development Subsidies Per Unit, by General Location and for Seven Metropolitan Areas, in 1999 Dollars

		HOPE VI[a]				
Location	**Tax credits**	**Housing-related costs**	**All costs**	**Section 202[a]**	**Section 811[a]**	**Section 515**
Nation	$50,350	$117,920	$143,450	$73,510	$70,430	$41,730
Metro	52,790	117,920	143,450	75,430	73,020	[b]
Nonmetro	44,690	[b]	[b]	60,270	63,120	41,730
Seven metro areas						
Baltimore	51,780	166,380	221,210	80,250	69,420	[b]
Boston	50,630	197,000	261,610	94,160	96,000	[b]
Chicago	62,190	102,470	108,950	75,020	71,370	[b]
Dallas/Fort Worth	31,470	78,920	96,460	52,390	66,710	[b]
Denver	29,080	102,170	126,440	72,160	74,640	[b]
Los Angeles	81,380	113,060	154,310	94,360	97,520	[b]
New York	111,780	76,710	107,010	101,730	116,180	[b]

[a]For the HOPE VI, Section 202, and Section 811 programs, total costs are paid entirely up front and no debt service payments are made for these units. As a result, the total development subsidies are equal to the total development costs.

[b]Since Section 515 primarily serves nonmetropolitan areas, we do not show Section 515 data for metropolitan areas. Also, since HOPE VI exclusively serves metropolitan areas, we do not show HOPE VI data for nonmetropolitan areas.

As shown in table 3, the development subsidies for the tax credit and Section 515 programs are generally lower than for the HOPE VI, Section

[40]We estimated the interest subsidies using the same procedure we used for Section 515 below-market loans.

202, and Section 811 programs, whose total development costs are covered by federal grants. However, the development subsidies for tax credit properties in the New York metropolitan area are quite high. In New York, the city provides all first mortgages on tax credit projects at steep discounts, substantially increasing the level of development subsidies. In the Los Angeles metropolitan area, state and local governments have given priority to tax credit proposals for single-room-occupancy developments and have provided substantial subsidies.

As shown in table 4, voucher rents, which include both the tenant and federal contributions, are higher than rents for the five housing production programs. Unlike the production program rents, which are reduced by development subsidies, the voucher rents are consistent with market rents. Development subsidies can be used to lower rents, pay for additional costs, and/or provide additional amenities. For the HOPE VI, Section 202, and Section 811 programs, rents need only cover operating costs and replacement reserves, since up-front federal grants pay the total development costs. For the tax credit and Section 515 programs, under which portions of the development costs are financed and rents must cover debt service payments, rents are somewhat higher than for the other production programs but are still generally below market rents.

Table 4: Average Monthly Rents, by General Location and for Seven Metropolitan Areas, in 1999 Dollars

		Production program				
Location	**Housing vouchers[a]**	**Tax credits**	**HOPE VI[b]**	**Section 202**	**Section 811**	**Section 515**
Nation	$610	$540	$430	$340	$320	$380
Metro	650	530	430	350	340	[d]
Nonmetro	440	450	[c]	300	280	380
Seven metro areas						
Baltimore	630	510	[c]	380	250	[d]
Boston	880	820	[c]	420	470	[d]
Chicago	640	500	[c]	470	450	[d]
Dallas/Fort Worth	650	670	[c]	310	310	[d]
Denver	710	700	[c]	290	350	[d]
Los Angeles	730	440	[c]	380	440	[d]
New York	750	430	[c]	490	550	[d]

[a]For vouchers, the average rent does not include a monthly administrative fee, which, at the national level, averages about $48 per unit and, in the seven metropolitan areas, ranges from $42 per unit in Denver to $61 per unit in Los Angeles.

[b]Our estimate of HOPE VI "rent" is based on the national average operating subsidy plus tenant contribution for all public housing units.

[c]For individual metropolitan areas, reliable cost data were not available.

[d]Since Section 515 units are located in rural areas, rent data are presented for nonmetropolitan areas only.

Comparing Program Costs

In this report, we estimated total program costs over 30 years.[41] In this appendix, we also provide estimates of costs in the first year, as reported in our interim report. For vouchers, the total life-cycle cost is the present discounted value of a 30-year flow of rents plus the present discounted value of the administrative fee over 30 years. We assumed an annual rent inflation rate of 3 percent.[42] Furthermore, as discussed in appendix II, we tested the sensitivity of our cost estimates to different inflation rates. For the production programs, we calculated the present discounted value of the rental income stream over 30 years, again assuming an annual rent inflation rate of 3 percent, plus the present discounted value of the development subsidies.[43] For the development subsidies, we took the actual payments made over time for each of the subsidies and summed the present discounted value of each of those flows using the 6-percent government discount rate. For example, for tax credits, we took the present discounted value of the 10-year flow of credits to investors. In estimating the first-year cost of vouchers, we simply added the total annual rent in the first year and the annual administrative fee. For the production programs, we added the total annual rent in the first year and the present value of the development subsidies, annualized over 30 years at the government discount rate of 6 percent.

[41]We assumed a 30-year holding period because each of the housing production programs we evaluated has a low-income-use restriction of at least 30 years.

[42]To project out rents over 30 years, we used a constant rate of 3 percent, which was based on a 10-year average rate of rent inflation for the nation according to the Consumer Price Index.

[43]Assuming the same rate of rent inflation for vouchers and the production programs may overstate the costs of the production programs. Under the housing production programs, increases in rents are restricted by the programs' guidelines. For example, rents in tax credit properties are usually limited to 30 percent of either 50 or 60 percent of the area median income, adjusted for unit size.

Table 5 shows our estimates of the total average per-unit costs of the six active housing programs. Columns 2 and 5 provide the average per-unit costs of production programs for the first year and 30 years, respectively. However, these averages do not reflect adjustments for the differences in unit size shown in column 1.

Table 5: Average First- and 30-Year Total Costs Per Unit: Housing Production Program Costs Compared With Voucher Costs, Adjusted for General Location and Unit Size, in 1999 Dollars

		First year			30 years		
Program/Location	Average number of bedrooms (1)	Total per-unit cost (2)	Adjusted total per-unit cost of voucher (3)	Program total cost as a percentage of adjusted voucher cost (4)	Total per-unit cost (5)	Adjusted total per-unit cost of voucher (6)	Program total cost as a percentage of adjusted voucher cost (7)
Vouchers							
Nation	2.2	$7,870	[a]	[a]	$160,580	[a]	[a]
Metro	2.2	8,350	[a]	[a]	170,370	[a]	[a]
Nonmetro	2.1	5,660	[a]	[a]	115,500	[a]	[a]
Tax credits							
Nation	1.9	10,110	$7,380	137%	181,870	$150,470	121%
Metro	1.9	10,200	7,770	131	182,710	158,510	115
Nonmetro	2.0	8,610	5,390	160	154,100	109,990	140
HOPE VI							
Metro[b]							
Housing-related costs	2.4	13,730	8,610	159	223,190	175,580	127
All costs	2.4	15,580	8,610	181	248,720	175,580	142
Section 202							
Nation	1.0	9,420	6,480	145	156,590	132,110	119
Metro	1.0	9,790	6,840	143	162,720	139,520	117
Nonmetro	1.0	7,950	4,700	169	132,600	95,890	138
Section 811							
Nation	1.0	8,930	6,480	138	148,290	132,110	112
Metro	1.0	9,320	6,840	136	154,820	139,520	111
Nonmetro	1.1	7,800	4,770	164	129,620	97,310	133
Section 515							
Nonmetro[c]	1.6	7,640	5,190	147	135,840	105,800	128

[a]Not applicable.

[b]All of HOPE VI's units are located in metropolitan areas.

[c]Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

In this report, we examine the cost of one- and two-bedroom units. For HOPE VI, we did not have data on individual unit sizes. To compare HOPE VI costs with voucher costs, we took the actual average rent for a voucher unit with a given number of bedrooms and interpolated a rent consistent with the average number of bedrooms for HOPE VI. For example, the average size of a HOPE VI unit was 2.4 bedrooms in 1999, and all of these units were located in metropolitan areas. The average rent for the voucher program at that time was $610 for a two-bedroom unit and $752 for a three-bedroom unit in metropolitan areas. We subtracted these two rents and multiplied the difference ($142) by the fraction by which the size of the average HOPE VI unit exceeded two bedrooms (0.4). We added the resulting product ($57) to the average rent for a two-bedroom voucher unit to derive our estimate of the rent for a 2.4-bedroom voucher unit—about $667. Finally, we added the average administrative fee, which is about $50 per month in metropolitan areas. The resulting total cost of vouchers is about $717 per month, or about $8,610 per year (see table 5).

In our interim report, we made these interpolations for unit size to compare the cost of vouchers with the cost of each production program. In table 5, columns 3 and 6 provide the adjusted voucher costs. These adjustments may narrow or widen the gap between the costs of vouchers and of a specific production program. Tax credit, Section 202, and Section 811 units are smaller, on average, than voucher units. As a result, this adjustment widens the gap between the costs of these programs and vouchers. Columns 4 and 7 present the total cost of the production programs as a percentage of the costs of adjusted vouchers. Although all of the production programs are more expensive than vouchers, both in the first year and over 30 years, the difference is smaller over 30 years. The magnitude of the difference decreases over time because the government subsidies for the production programs are fixed while the voucher subsidies increase with market rents. Furthermore, because of the development subsidies, the rents for production program units are lower initially than the rents for voucher units, as was shown in table 4. Therefore, even though we assumed the same rate of rent inflation for both types of units, the impact of rent inflation is less for the production programs because their starting rents are lower than voucher units.

A problem with the adjusted costs presented in table 5 is that they provide for cost comparisons between vouchers and only one production program

at a time. Because of differences in average unit size across the production programs, we could not compare costs across these programs. To provide for cost comparisons across all of the programs, we used a second approach, calculating the average first-year and 30-year costs for one- and two-bedroom units, as shown in table 6. For vouchers, we knew the number of bedrooms for each recipient, so we simply calculated the average rents for one- and two-bedroom units. For the production programs, except HOPE VI, we knew the rents by the number of bedrooms. Table 6 does not include the HOPE VI program because cost data were not available by the number of bedrooms. For each project that has one- or two-bedroom units, we calculated the average development subsidy per unit. Since projects may have a mixture of units of different sizes, there will be some error in assigning an average per-unit subsidy across all units.

Table 6: Average First- and 30-Year Total Costs of One- and Two-Bedroom Units, by General Location, in 1999 Dollars

	First year			30 years		
Unit size/Program	**Nation**	**Metro**	**Nonmetro**	**Nation**	**Metro**	**Nonmetro**
One-bedroom						
Vouchers	$6,480	$6,840	$4,700	$132,110	$139,520	$95,890
Tax credits	9,100	9,280	7,600	164,270	166,610	138,060
Section 202	9,250	9,480	7,950	153,510	157,410	133,070
Section 811	8,850	9,140	7,850	146,600	151,280	129,890
Section 515	[a]	[a]	7,470	[a]	[a]	132,890
Two-bedroom						
Vouchers	7,460	7,920	5,390	152,170	161,650	110,050
Tax credits	10,080	10,240	8,500	182,150	184,130	151,350
Section 811	9,690	10,350	8,430	160,370	171,240	139,480
Section 515	[a]	[a]	7,500	[a]	[a]	132,600

Note: Due to data limitations, we cannot present HOPE VI cost by bedroom size. Also, Section 202 does not generally develop two-bedroom units and, as a result, is not included in our two-bedroom analysis.

[a]Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

Table 7 presents our estimates of the total costs of one-bedroom units in metropolitan areas nationwide and in the seven metropolitan areas we selected for review. This table does not include information for the HOPE VI program because data were not available to identify costs by unit size for

these metropolitan areas. The table also excludes data for the Section 515 program because it is primarily used in nonmetropolitan areas.

Table 7: Average First- and 30-Year Total Costs of One-Bedroom Units, by General Location and for Seven Metropolitan Areas, in 1999 Dollars

	First year				30 years			
Location	**Vouchers**	**Tax credits**	**Section 202**	**Section 811**	**Vouchers**	**Tax credits**	**Section 202**	**Section 811**
Metro	$6,840	$9,280	$9,480	$9,140	$139,520	$166,610	157,410	$151,280
Seven metro areas								
Baltimore	6,740	9,460	10,380	[a]	137,410	169,980	173,160	[a]
Boston	9,480	10,900	12,050	12,290	193,400	205,950	201,310	204,440
Chicago	6,620	10,310	9,760	10,040	135,000	181,210	163,000	170,320
Dallas/ Fort Worth	6,150	8,030	7,480	8,540	125,400	152,130	127,350	142,080
Denver	6,330	9,380	8,660	10,700	129,160	180,760	141,890	182,290
Los Angeles	7,820	10,200	10,980	12,950	159,550	177,320	178,460	214,340
New York	8,200	12,410	13,290	[a]	167,300	201,820	222,030	[a]

Note: Section 515 is not included in this table because it develops properties in rural areas. Due to data limitations, we cannot present HOPE VI cost by bedroom size.

[a]There were too few properties to estimate the average cost of one-bedroom units.

Table 8 provides our estimates of the total cost of two-bedroom units in metropolitan areas nationwide and in our seven metropolitan areas. Besides excluding the HOPE VI and Section 515 programs, this table excludes the Section 202 program because it primarily provides one-bedroom units. Information for the Section 811 program was also very limited.

Table 8: Average First- and 30-Year Total Costs of Two-Bedroom Units, by General Location and for Seven Metropolitan Areas, in 1999 Dollars

	First year			30 years		
Location	**Vouchers**	**Tax credits**	**Section 811**	**Vouchers**	**Tax credits**	**Section 811**
Metro	$7,920	$10,240	$10,350	$161,650	$184,130	$171,240
Seven metro areas						
Baltimore	7,830	10,720	[a]	159,760	198,190	[a]
Boston	10,900	14,270	[a]	222,350	263,980	[a]
Chicago	7,940	11,400	12,280	161,970	202,480	213,500
Dallas/Fort Worth	7,690	9,930	[a]	156,780	189,000	[a]
Denver	8,420	10,820	10,020	171,690	207,760	160,610
Los Angeles	9,410	13,520	13,170	192,020	232,040	217,380
New York	9,710	14,290	13,970	198,090	232,690	231,350

Note: Section 515 is not included in this table because it develops properties in rural areas. Also, Section 202 does not generally develop two-bedroom units and, as a result, is not included in this table. Due to data limitations, we cannot present HOPE VI cost by bedroom size.

[a]There were too few properties to estimate the cost of two-bedroom units.

Cost Shares

Table 9 presents the average share of the total per-unit cost of a one-bedroom unit paid under the various programs by the federal government, tenants, and other sources, including state, local, and private entities. With the exception of vouchers, housing programs make different sources of funding available to varying degrees. The tax credit program, for example, involves more development subsidies from state, local, and private entities than the Section 202 and Section 811 programs. For all programs except tax credits, we obtained the average federal rental assistance payment and tenant contribution for each property. For the tax credit program, no data were available on the amount of rental assistance provided by the federal government. Using data from our 1997 report on tax credits, we estimated the percentage of average rent paid for all units by the federal government in the form of Section 8 tenant-based and project-based assistance.[44] In our

[44]According to our report entitled *Tax Credits: Opportunities to Improve Oversight of the Low-Income Housing Program* (GAO/GGD/RCED-97-55, Mar. 28, 1997), the average annual rent for 1992 to 1994 was $5,760 and the average Section 8 subsidy was about $1,500 for all units. When we divide the average subsidy by the average rent, the resulting percentage is 26 percent.

30-year analysis, we increase both the federal and tenant contributions for rent at the same rate.

Table 9: Average Share of First- and 30-Year Total Costs of One-Bedroom Units Paid by the Federal Government, Tenants, and Others, in 1999 Dollars

	First year				30 years			
Program/Location	Federal cost share	Tenant cost share	Other cost share[a]	Total cost	Federal cost share	Tenant cost share	Other cost share[a]	Total cost
Vouchers								
Nation	$4,190	$2,290	[b]	$6,480	$85,410	$46,700	[b]	$132,110
Metro	4,490	2,350	[b]	6,840	91,670	47,850	[b]	139,520
Nonmetro	2,690	2,010	[b]	4,700	54,800	41,090	[b]	95,890
Tax credits								
Nation	4,020	4,340	$740	9,100	65,480	88,580	$10,210	164,270
Metro	4,090	4,340	850	9,280	66,420	88,460	11,730	166,610
Nonmetro	3,380	3,730	480	7,600	55,290	76,150	6,620	138,060
Section 202								
Nation	6,810	2,260	190	9,250	104,900	46,060	2,550	153,510
Metro	6,900	2,370	210	9,480	106,230	48,260	2,930	157,410
Nonmetro	5,960	1,980	8	7,950	92,630	40,330	110	133,070
Section 811								
Nation	6,570	2,000	280	8,850	102,040	40,750	3,810	146,600
Metro	6,780	2,020	340	9,140	105,370	41,210	4,700	151,280
Nonmetro	5,780	1,930	150	7,850	88,530	39,330	2,030	129,890
Section 515								
Nonmetro	4,800	2,280	390	7,470	81,010	46,510	5,370	132,890

Note: Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

[a]"Other cost share" includes state, local, and private funding sources.

[b]Not applicable.

Table 10 presents the share of costs paid by these different sources for two-bedroom units. Although data were not available to calculate cost shares for HOPE VI units of different sizes, we included the cost share for the average HOPE VI unit, with 2.4 bedrooms. Also, since we did not have HOPE VI data on operating subsidies and tenant contributions for individual properties, we applied the average per-unit operating subsidy and tenant contribution for all public housing units. Finally, Section 202

does not provide two-bedroom units and, consequently, does not appear in table 10.

Table 10: Average Share of First- and 30-Year Total Costs of Two-Bedroom Units Paid by the Federal Government, Tenants, and Others, in 1999 Dollars

	First year				30 years			
Program/ Location	Federal cost share	Tenant cost share	Other cost share[a]	Total cost	Federal cost share	Tenant cost share	Other cost share[a]	Total cost
Vouchers								
Nation	$4,760	$2,700	[b]	$7,460	$97,160	$55,020	[b]	$152,170
Metro	5,110	2,820	[b]	7,920	104,230	57,420	[b]	161,650
Nonmetro	3,220	2,180	[b]	5,390	65,680	44,380	[b]	110,050
Tax credits								
Nation	4,450	4,840	$790	10,080	72,540	98,670	$10,930	182,150
Metro	4,470	4,820	950	10,240	72,740	98,280	13,110	184,130
Nonmetro	4,090	3,820	600	8,500	65,180	77,980	8,200	151,350
HOPE VI								
Metro[c]								
Housing-related costs	10,210	2,320	1,190	13,730	159,350	47,400	16,430	223,190
All costs	11,900	2,320	1,360	15,580	182,650	47,400	18,660	248,720
Section 811								
Nation	7,020	2,180	480	9,690	109,190	44,550	6,630	160,370
Metro	7,680	2,120	540	10,350	120,430	43,320	7,490	171,240
Nonmetro	5,760	2,300	370	8,430	87,490	46,960	5,020	139,480
Section 515								
Nonmetro[d]	4,890	2,280	330	7,500	81,540	46,510	4,550	132,600

Note: Section 202 does not generally develop two-bedroom units and, as a result, is not included in the two-bedroom analysis.

[a]"Other cost share" includes state, local, and private funding sources.

[b]Not applicable.

[c]All of HOPE VI's units are located in metropolitan areas.

[d]Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

Using the approach in our interim report, table 11 presents our estimates of the average federal per-unit costs of the six housing programs. Columns 2 and 5 provide the average federal costs for the first year and 30 years, respectively. In comparing the federal costs of the production programs

and vouchers, we made adjustments to reflect the differences in average unit size, as shown in column 1, and in average tenant contributions. To estimate federal voucher cost that accounts for differences in tenant contribution, we simply subtracted the average tenant contribution for each of the production programs from the interpolated total voucher costs (shown in table 5, columns 3 and 6). This adjusted federal cost appears in columns 3 and 6 in table 11. In other words, we assumed that the average tenant contributions under the voucher program were the same as those under the production programs.

Table 11: Average First- and 30-Year Federal Costs Per Unit: Housing Production Program Federal Costs Compared With Voucher Federal Costs Adjusted for General Location, Unit Size, and Tenant Contribution, in 1999 Dollars

		First year			30 years		
Program/ Location	Average number of bedrooms (1)	Actual federal per-unit cost (2)	Adjusted federal per-unit voucher cost (3)	Actual federal cost as a percentage of adjusted federal voucher cost (4)	Actual federal per-unit cost (5)	Adjusted federal per-unit voucher cost (6)	Actual federal cost as a percentage of adjusted federal voucher cost (7)
Tax credits							
Nation	1.9	$4,500	$2,610	172%	$73,010	$53,190	137%
Metro	1.9	4,510	3,060	147	73,020	62,420	117
Nonmetro	2.0	4,050	1,430	283	65,040	29,070	224
HOPE VI							
Metro[a]							
Housing-related costs	2.4	10,210	6,280	163	159,350	128,170	124
All costs	2.4	11,900	6,280	189	182,650	128,170	143
Section 202							
Nation	1.0	6,920	4,200	165	107,130	85,610	125
Metro	1.0	7,050	4,470	158	109,090	91,080	120
Nonmetro	1.0	5,960	2,790	214	92,630	57,000	163
Section 811							
Nation	1.0	6,680	4,440	150	104,100	89,780	116
Metro	1.0	6,940	4,760	146	108,410	100,240	108
Nonmetro	1.1	5,800	2,840	204	88,860	60,280	147
Section 515							
Nonmetro[b]	1.6	4,960	2,910	170	83,690	59,290	141

[a]All of HOPE VI's units are located in metropolitan areas.

[b]Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

The comparison of federal cost can also be analyzed by unit size. Table 12 presents the average federal per-unit costs for one-bedroom units. As in table 11, we adjusted the federal voucher cost by assuming that the households assisted with vouchers made the same average contribution toward rent as the households under the production programs.

Table 12: Average First- and 30-Year Federal Costs for One-Bedroom Units: Housing Production Program Federal Costs Compared With Voucher Federal Costs, Adjusted for General Location and Tenant Contribution, in 1999 Dollars

	First year			30 years		
Program/ Location	Actual federal per-unit cost	Adjusted federal per-unit voucher cost	Actual federal cost as a percentage of adjusted federal voucher cost	Actual federal per-unit cost	Adjusted federal per-unit voucher cost	Actual federal cost as a percentage of adjusted federal voucher cost
Tax credits						
Nation	$4,020	$2,140	188%	$65,480	$43,530	150%
Metro	4,090	2,500	164	66,420	51,060	130
Nonmetro	3,380	970	348	55,290	19,740	280
Section 202						
Nation	6,810	4,220	161	104,900	86,050	122
Metro	6,900	4,470	154	106,230	91,260	116
Nonmetro	5,960	2,720	219	92,630	55,560	167
Section 811						
Nation	6,570	4,480	147	102,040	91,360	112
Metro	6,780	4,820	141	105,370	98,310	107
Nonmetro	5,780	2,770	209	88,530	56,560	157
Section 515						
Nonmetro[a]	4,800	2,420	198	81,010	49,380	164

Note: Due to data limitations, we cannot present HOPE VI cost by bedroom size.

[a]Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

Similarly, table 13 presents the average federal costs for two-bedroom units.

Table 13: Average First- and 30-Year Federal Costs for Two-Bedroom Units: Housing Production Program Federal Costs Compared With Voucher Federal Costs, Adjusted for General Location and Tenant Contribution, in 1999 Dollars

	First year			30 years		
Program/ Location	Actual federal per-unit cost	Adjusted federal per-unit voucher cost	Actual federal cost as a percentage of adjusted federal voucher cost	Actual federal per-unit cost	Adjusted federal per-unit voucher cost	Actual federal cost as a percentage of adjusted federal voucher cost
Tax credits						
Nation	$4,450	$2,620	170%	$72,540	$53,500	136%
Metro	4,470	3,100	144	72,740	63,370	115
Nonmetro	4,090	1,570	261	65,180	32,070	203
Section 811						
Nation	7,020	5,280	133	109,190	107,620	101
Metro	7,680	5,800	132	120,430	118,330	102
Nonmetro	5,760	3,090	186	87,490	63,090	139
Section 515						
Nonmetro[a]	4,890	3,110	157	81,540	63,540	128

Note: Due to data limitations, we cannot present HOPE VI cost by bedroom size. In addition, Section 202 does not generally develop two-bedroom units and, as a result, is not included in the two-bedroom analysis.

[a]Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

Sources of Data Used in the Analysis

The sources of data used in our analysis vary by program and by our seven metropolitan areas. The primary sources of these data were the headquarters and field offices of HUD and of the U.S. Department of Agriculture's (USDA) Rural Housing Service (RHS), public housing authorities, and managing agents and owners of federally assisted properties. For the tax credit program, we also relied heavily on tax credit data collected and analyzed by a private research firm, supplemented by data we collected from state housing finance agencies. We attempted to verify the accuracy of the data collected and corrected any observed errors. We converted all development cost and rent data to 1999 dollars using the Consumer Price Index. For all of the programs, we relied on the information provided by the various offices. However, we contacted the appropriate officials or property management agents to correct any apparent inaccuracies in the data we received.

Housing Vouchers

We obtained from HUD national and aggregate metropolitan-area data from the Multifamily Tenant Characteristics Systems on gross rents, housing assistance payments, tenant contributions, and incomes for the housing voucher and certificate programs. We also collected information from HUD and individual housing authorities on the average administrative fee paid to housing authorities. These data were provided for about 1.4 million households participating in the programs in 2000.

Tax Credits

Because of the decentralized nature of the tax credit program, there is no national database to evaluate the program's characteristics, including costs. Consequently, we relied extensively on rent and development subsidy data collected and analyzed by City Research, which is a private research firm located in Boston. City Research assembled and analyzed detailed data on over 2,500 tax credit properties, with over 150,000 units, which were acquired by 4 national syndicators.[45] These units were estimated to represent about 25 to 27 percent of those generated under the program from 1987 through 1996. The results of City Research's analyses were published in a report and in a housing journal.[46] We compared the nationwide rent data collected by City Research with the data collected for our 1997 study[47] and supplemented City Research's data with our data on tax credit properties placed in service in 1999 within the seven metropolitan areas.

HOPE VI

We obtained data from HUD on the total development costs for 130 planned and completed HOPE VI developments, which contained about 63,560 planned units as of 2000. Approximately 10 percent of these properties were either completed or substantially completed. HOPE VI properties use multiple sources of funding, but the data were not sufficiently detailed to identify funding by individual sources other than the HOPE VI and HUD

[45]The four syndicators were Boston Capital Partners, Inc.; Boston Financial; Enterprise Social Investment Corporation; and the National Equity Fund, Inc. Each of these syndicators has a national portfolio and has been active in the tax credit market throughout the tax credit program's history.

[46]*Building Affordable Rental Housing: An Analysis of the Low-Income Housing Tax Credit* (Feb. 1998) and "The Low-Income Housing Tax Credit: The First Ten Years," *Housing Policy Debate*, Vol. 10, Issue 2 (1999).

[47]GAO/GGD/RCED-97-55.

grants. For properties in the seven metropolitan areas, we contacted public housing authorities and were able to obtain complete data on their sources of funds. For our national cost estimate, we based the distribution of costs paid by state, local, and private entities on the actual cost shares in our seven metropolitan areas. The properties in the seven metropolitan areas constituted about 20 percent of the units in our HOPE VI inventory. The HOPE VI program also funds various types of activities (e.g., property demolition, tenant relocation, and community services) in addition to housing-related construction. We estimated both housing-related costs and all costs for the HOPE VI program.

Public housing, in general, does not identify revenues and expenses on a property-by-property basis. This information also is not available for the HOPE VI program. Consequently, to estimate a national rent for the HOPE VI program, we obtained from HUD the average tenant rental contribution and operating subsidy paid by HUD for all public housing units. Together, these payments constitute an approximation of a traditional rental payment.

Section 202 and Section 811

HUD identified about 135 properties, comprising about 6,040 units, that were placed in service nationwide in fiscal year 1998 under the Section 202 program and about 115 properties, comprising about 1,420 units, under the Section 811 program. From the list provided, we contacted 39 HUD field offices to obtain detailed data on the properties' total development costs and the sources of funds used to pay these costs. We also obtained data from the field offices on properties' rents. Most of the seven metropolitan areas did not have enough properties placed in service in 1998 to compute meaningful averages for development costs and rents. Consequently, we asked the field offices to identify the properties placed in service from 1996 to 1999 to ensure that we would have at least four properties under each program to better compute such averages.

Section 515

RHS state offices identified 53 Section 515 properties, containing about 1,250 units, that were placed in service in fiscal year 1998. The state offices provided data on total development costs, including the sources and terms of funds used to finance these costs. The state offices also provided information on 1999 rents. Since Section 515 is a rural program, we did not include it in our analysis of the seven metropolitan areas.

Sensitivity Analysis

To test the robustness of the results presented in this report and illustrate the sensitivity of our estimates to specific assumptions about rental market conditions, the following tables provide estimates of the 30-year total costs of the six housing programs when two different rates are used to increase rents over time. In the letter and appendix I, our base 30-year cost estimates assume an annual rate increase of 3 percent, which approximates the annual average rent inflation for the past 10 years (about 2.9 percent), according to the Consumer Price Index. We discounted the annual costs by 6 percent, which is the approximate 30-year discount rate published by the Office of Management and Budget. In tables 14 through 19, we estimate the average 30-year total costs of the housing programs using rates of rent increases that are 2 percentage points above and below our base rate.

Overall, an increase in the rate of inflation from our base estimate of 3 percent to 5 percent decreases the difference in total cost between the production programs and vouchers. As noted in appendix I, the production programs are less vulnerable than vouchers to inflation in market rents because, among other things, development subsidies are fixed over time. Consequently, rent inflation has a smaller impact on the production programs than on vouchers because the starting rents are lower for the production programs than for vouchers.

Table 14: Average 30-Year Total Costs of Housing Programs Per Unit Under Different Rates of Inflation, by General Location, in 1999 Dollars

		30-year total costs at an inflation rate of:	
Program/Location	**Average unit size**	**1 percent**	**5 percent**
Vouchers			
Nation	2.2	$127,710	$206,510
Metro	2.2	135,490	219,090
Nonmetro	2.1	91,860	148,540
Tax credits			
Nation	1.9	154,950	219,490
Metro	1.9	156,120	219,870
Nonmetro	2.0	131,710	185,400
HOPE VI			
Metro[a]			
Housing-related costs	2.4	201,640	253,290
All costs	2.4	227,170	278,820

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Program/Location	Average unit size	30-year total costs at an inflation rate of: 1 percent	5 percent
Section 202			
Nation	1.0	139,770	180,660
Metro	1.0	144,040	186,380
Nonmetro	1.0	118,170	153,890
Section 811			
Nation	1.0	133,540	172,480
Metro	1.0	138,500	178,890
Nonmetro	1.1	117,050	150,320
Section 515			
Nonmetro [b]	1.6	116,570	162,750

[a]All HOPE VI units are located in metropolitan areas.

[b]Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

Table 15: Average 30-Year Total Costs Per Unit Under Different Rates of Inflation: Housing Production Program Costs Compared With Voucher Costs, Adjusted for General Location and Unit Size, in 1999 Dollars

	30-year total costs at an inflation rate of:					
	1 percent			5 percent		
Production program/Location	Average total per-unit cost of production program	Adjusted total per-unit cost of voucher	Production program cost as a percentage of voucher cost	Average total per-unit cost of production program	Adjusted total per-unit cost of voucher	Production program cost as a percentage of voucher cost
Vouchers						
Nation	$127,710	[a]	[a]	$206,510	[a]	[a]
Metro	135,490	[a]	[a]	219,090	[a]	[a]
Nonmetro	91,860	[a]	[a]	148,540	[a]	[a]
Tax credits						
Nation	154,950	$119,670	129%	219,490	$193,500	113%
Metro	156,120	126,060	124	219,870	203,840	108
Nonmetro	131,710	87,470	151	185,400	141,450	131
HOPE VI						
Metro[b]						
Housing-related costs	201,640	139,640	145	253,290	225,790	112
All costs	227,170	139,640	163	278,820	225,790	123

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	30-year total costs at an inflation rate of:					
	1 percent			5 percent		
Production program/Location	**Average total per-unit cost of production program**	**Adjusted total per-unit cost of voucher**	**Production program cost as a percentage of voucher cost**	**Average total per-unit cost of production program**	**Adjusted total per-unit cost of voucher**	**Production program cost as a percentage of voucher cost**
Section 202						
Nation	139,770	105,070	133	180,660	169,890	106
Metro	144,040	110,960	130	186,380	179,420	104
Nonmetro	118,170	76,260	155	153,890	123,310	125
Section 811						
Nation	133,540	105,070	127	172,480	169,890	102
Metro	138,500	110,960	125	178,890	179,420	100
Nonmetro	117,050	77,390	151	150,320	125,130	120
Section 515						
Nonmetro[c]	116,570	84,150	139	162,750	136,060	120

[a]Not applicable.

[b]All HOPE VI units are located in metropolitan areas.

[c]Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

Table 16: Average 30-Year Total Costs of One- and Two-Bedroom Units Under Different Rates of Inflation, by General Location, in 1999 Dollars

	30-year total costs at an inflation rate of:					
	1 percent			5 percent		
Unit size/Program	Nation	Metro	Nonmetro	Nation	Metro	Nonmetro
One-bedroom						
Vouchers	$105,070	$110,960	$76,260	$169,890	$179,420	$123,320
Tax credits	139,750	142,120	116,980	198,520	200,820	167,510
Section 202	137,010	140,490	118,170	176,550	181,060	153,890
Section 811	130,990	135,260	116,150	168,410	173,660	149,080
Section 515	[a]	[a]	113,930	[a]	[a]	159,390
Two-bedroom						
Vouchers	121,020	128,560	87,520	195,690	207,880	141,530
Tax credits	154,840	156,930	129,770	220,300	222,130	181,500
Section 811	143,370	153,100	124,710	184,130	196,580	160,100
Section 515	[a]	[a]	114,110	[a]	[a]	158,450

Note: Due to data limitations, we cannot present HOPE VI cost by bedroom size. Also, Section 202 does not generally develop two-bedroom units and, as a result, is not included in the two-bedroom analysis.

[a]Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

Table 17: Average Federal Share of 30-Year Total Costs Per Unit Under Different Rates of Inflation: Housing Production Program Costs Compared With Voucher Costs, Adjusted for General Location, Unit Size, and Tenant Contribution, in 1999 Dollars

	30-year total costs at an inflation rate of:					
	1 percent			5 percent		
Program/ Location	Actual federal cost	Estimated federal voucher cost	Actual federal cost as a percentage of estimated federal voucher cost	Actual federal cost	Estimated federal voucher cost	Actual federal cost as a percentage of estimated federal voucher cost
Tax credits						
Nation	$66,000	$42,310	156%	$82,810	$68,410	121%
Metro	66,100	49,640	133	82,700	80,270	103
Nonmetro	59,210	23,110	256	73,190	37,390	196
HOPE VI						
Metro[a]						
Housing-related costs	147,510	101,940	145	175,900	164,830	107
All costs	170,810	101,940	168	199,200	164,830	121
Section 202						
Nation	99,670	67,780	147	117,550	109,600	107
Metro	101,520	71,720	142	119,650	115,970	103
Nonmetro	85,990	44,190	195	101,920	71,450	143
Section 811						
Nation	96,490	71,540	135	114,740	115,670	99
Metro	100,280	77,060	130	119,770	124,610	96
Nonmetro	83,210	45,430	183	96,770	73,450	132
Section 515						
Nonmetro[b]	73,950	47,160	157	97,300	76,240	128

[a]All of HOPE VI units are located in metropolitan areas.

[b]Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

Table 18: Average Federal Share of 30-Year Total Costs of One-Bedroom Units Under Different Rates of Inflation: Housing Production Program Costs Compared With Voucher Costs, Adjusted for General Location and Tenant Contribution, in 1999 Dollars

	30-year total costs at an inflation rate of					
	1 percent			5 percent		
Program/ Location	Actual federal cost	Estimated federal voucher cost	Actual federal cost as a percentage of estimated federal voucher cost	Actual federal cost	Estimated federal voucher cost	Actual federal cost as a percentage of estimated federal voucher cost
Tax credits						
Nation	$59,090	$34,620	171%	$74,400	$55,970	133%
Metro	60,050	40,610	148	75,330	65,660	115
Nonmetro	49,810	15,700	317	62,960	25,390	248
Section 202						
Nation	97,840	68,440	143	114,770	110,660	104
Metro	99,180	72,580	137	116,070	117,360	99
Nonmetro	85,990	44,190	195	101,920	71,450	143
Section 811						
Nation	94,770	72,660	130	112,200	117,490	95
Metro	97,790	78,180	125	115,960	126,420	92
Nonmetro	82,840	44,980	184	96,480	72,730	133
Section 515						
Nonmetro[a]	71,560	39,270	182	94,200	63,490	148

Note: Due to data limitations, we cannot present HOPE VI cost by bedroom size.

[a]Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

Table 19: Average Federal Share of 30-Year Total Costs of Two-Bedroom Units Under Different Rates of Inflation: Housing Production Program Costs Compared With Voucher Costs, Adjusted for General Location and Tenant Contribution, in 1999 Dollars

	30-year total costs at an inflation rate of:					
	1 percent			5 percent		
Program/ Location	Actual federal cost	Estimated federal voucher cost	Actual federal cost as a percentage of estimated federal voucher cost	Actual federal cost	Estimated federal voucher cost	Actual federal cost as a percentage of estimated federal voucher cost
Tax credits						
Nation	$65,430	$42,550	154%	$82,480	$68,800	120%
Metro	65,650	50,400	130	82,630	81,490	101
Nonmetro	59,560	25,510	233	73,030	41,250	177
Section 811						
Nation	101,310	85,590	118	120,210	138,400	87
Metro	111,160	94,100	118	133,380	152,170	88
Nonmetro	82,340	50,170	164	94,680	81,140	117
Section 515						
Nonmetro[a]	72,570	50,530	144	94,080	81,710	115

Note: Due to data limitation, we cannot present HOPE VI cost by bedroom size. Also, Section 202 does not generally develop two-bedroom units and, as a result, is not included in the two-bedroom analysis.

[a]Since Section 515 units are located in rural areas, it is more appropriate to compare the costs of Section 515 units in nonmetropolitan areas.

Evolution of Federal Housing Assistance Programs

Federal housing assistance, which began with the enactment of the U.S. Housing Act of 1937, involves subsidies to construct new affordable housing and to make rents affordable in existing rental housing. From 1937 through 1974, the emphasis was almost exclusively on new construction. Then, with the enactment of Section 8 of the 1937 Act, as amended in 1974, tenant-based rental assistance programs assumed growing importance. Finally, the Tax Reform Act of 1986 gave renewed impetus to new construction, and, over the last decade, the voucher and tax credit programs have provided the bulk of the new federal housing subsidies.

The federal government has supported several types of new construction programs, starting with public housing. Under this program, authorized in 1937, the government financed properties owned and managed by local public housing authorities. In 1966, it began contracting with private developers to build housing for low-income households in rural areas under the Section 515 Rural Rental Assistance program. Other early programs, including the Section 202 Elderly and Disabled Housing Direct Loan program and the Section 221(d)(3) Below-Market Interest Rate (BMIR) program, provided low-interest-rate loans to nonprofit organizations and cooperatives. In 1968, the Section 236 program succeeded the Section 221(d)(3) BMIR program and encouraged for-profit developers to produce affordable housing by subsidizing mortgage interest rates.

Questions about the cost-effectiveness of new construction led the Congress to explore options for using existing housing to shelter low-income families. In 1965, it tested one such option, enacting Section 23 of the 1937 Act, which authorized public housing authorities to lease private unsubsidized apartments for households eligible for public housing. In 1974, it added Section 8 to the 1937 Act and created the certificate program, the first major program to rely on existing privately owned rental housing and to provide tenant-based, rather than project-based, assistance. Another type of Section 8 assistance, the voucher program, started as a demonstration program in 1983, was made permanent in 1988, and operated simultaneously with the certificate program until 1998. At that time, the Congress consolidated the two programs into the Housing Choice Voucher Program, which combined features of both earlier programs. This program is now the largest federal housing assistance program.

From 1974 to 1986, federal housing policy emphasized the use of existing housing over new construction. Then, with the Tax Reform Act of 1986, the Congress renewed its commitment to housing production while continuing

to support tenant-based assistance. The 1986 Act substituted tax credits for older incentives to construct low-income housing, such as accelerated depreciation. Under the tax credit program, approximately 700,000 to 800,000 units have been built. In 2000, the Congress increased the per-capita allocation of tax credits from $1.25 to $1.50 beginning in 2001. In 2002, this allocation is scheduled to rise to $1.75, and beginning in 2003, the allocation will be adjusted for inflation. The program will likely soon become the second largest housing program (after vouchers) for low-income households. In large part because of the renewed emphasis on new construction through tax credits, the majority of the additional recipients of federal housing assistance since 1990 have received project-based assistance.

Other funds for new construction have come through the HOME Investment Partnerships Program, enacted in 1990, which awards block grants to state and local governments, primarily for the development of affordable housing. In addition, the HOPE VI program has provided grants since 1993 for local housing authorities to demolish their worst properties and replace them with lower density developments. Table 20 summarizes the history of federal housing assistance programs, including their authorization date and current status.

Table 20: Multifamily Housing Programs, by Type of Subsidy, in Order of Year Authorized

Program	Type of subsidy	Year authorized	Status	Description
Public Housing	Project-based: Operating subsidy Grant Debt-service payment Payment in lieu of taxes	1937	No new commitments since 1994 (see HOPE VI)	Pays for developing, operating, and modernizing projects owned by local public housing authorities. Before 1987, funds paid off debt service for project development costs over 20 to 40 years. From 1987 to 1994, development costs have been financed with up-front grants. Since 1970, the program has also paid approximately the difference between housing authorities' formula-determined cost levels and rent collections and other receipts.
Section 202 Elderly and Disabled Housing Direct Loan Program	Project-based: Direct loan with below-market interest rates Rental assistance payment[a]	1959	No new commitments since 1991	Provides direct loans at below-market rates for up to 40 years to finance the construction of rental housing for the elderly and disabled. All projects built since 1974 also receive Section 8 rent subsidies.
Section 221(d)(3) Below-Market Interest Rate	Project-based: Below-market interest rate loan Mortgage insurance Rental assistance payment[a]	1961	No new commitments since 1968	Provides subsidies that reduce to 3 percent the interest rate on private 40-year mortgages for multifamily rental housing. Tenants in certain units receive rent subsidies.
Section 515 Rural Rental Assistance	Project-based: Direct loan with below-market interest rates Rental assistance payment[a]	1962	Active	Provides direct loans to developers at a 1-percent interest rate. Supplementary rental assistance is provided to approximately half of the units through Section 521. Some units also receive rental assistance through the Section 8 programs.
Rent Supplement	Project-based: Rental assistance payment	1965	No new commitments since 1973	Provides rental assistance for housing projects insured under certain Federal Housing Administration (FHA) mortgage insurance programs. Most outstanding commitments under rent supplement programs have been converted to Section 8 rental assistance.
Section 23 Leased Housing	Project-based: Lease of privately owned units	1965	No new commitments since 1973	Local public housing authorities leased acceptable units from private landlords and sublet these units to eligible households at below-market rents. This program was a precursor of the Section 8 Existing Housing Certificates program.
Section 236	Project-based: Interest rate subsidy Mortgage insurance Rental assistance payment[a]	1968	No new commitments since 1973	Provides monthly subsidies that reduce to 1 percent the interest rate on private 40-year mortgages for multifamily rental projects. Tenants of certain units receive rent subsidies through the rental assistance program (RAP). Many units receiving RAP have been converted to Section 8 assistance.

(Continued From Previous Page)

Program	Type of subsidy	Year authorized	Status	Description
Section 521	Project-based: Rental assistance payment	1968	Active	Provides rental assistance payments to owners and developers of RHS-financed rental units under Section 515 and farm labor housing loans and grants (Section 514/516) on behalf of low-income tenants.
Section 8 New Construction and Substantial Rehabilitation	Project-based: Rental assistance payment Tax-exempt financing[a] Mortgage insurance[a] Below-market interest rate loan[a]	1974	No new commitments since 1983, except for Section 202 program (see above)	Provides rent subsidies in new or substantially rehabilitated projects. Subsidy initially covered the difference between tenants' payment and fair market rent, as determined by HUD. Subsidy contracts were for 20 to 40 years. Tax incentives and financing arrangements also may reduce owners' effective mortgage interest rates and project rents. Current restructuring of ongoing contracts will result in realignment of subsidy payments.
Section 8 Loan Management Set-Aside and Property Disposition	Project-based: Rental assistance payment	1974	No new commitments	Provides subsidies to units in financially troubled projects in the FHA-insured inventory and on the sale of HUD-owned projects, respectively. Subsidies ensure improved cash flows and preserve projects for lower income tenants. Subsidies cover the difference between tenant payments and unit rents, which often are below market rates because of other federal subsidies.
Section 8 Existing Housing Certificates	Tenant-based: Rental assistance payment	1974	Merged in 1998 with the Section 8 Voucher program	Aids low-income households to rent housing units in the market. Rent cannot exceed the HUD-established fair market rent for the geographical area. HUD pays the difference between the actual unit rent and the tenant payment. Administered by local public housing authorities, which enter into contracts with landlords.
Community Development Block Grants	Project-based: Grant	1974	Active	Distributes grants to local and state governments by formula for community development activities. The Housing and Community Development Act of 1974 established this program. Rehabilitation and other housing activities now consistently represent the largest single use of funds.
Section 8 Vouchers	Tenant-based: Rental assistance payment	1983	Merged in 1998 with Existing Housing Certificates	Similar to the Section 8 Certificate program in that assisted households could live in privately owned units and public housing authorities administered the program. Unlike the Certificate program in that recipients could occupy units whose rents exceeded the voucher payment standard—roughly equivalent to the fair market rent—if they paid the difference. If rents were below the payment standard, households could keep the difference (also known as the "shopper's incentive").

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Program	Type of subsidy	Year authorized	Status	Description
Low-Income Housing Tax Credits	Project-based: Tax credit	1986	Active	The Tax Reform Act of 1986 substituted tax credits for existing tax incentives to construct low-income housing, such as accelerated depreciation. The maximum tax credit allowed per year is about 9 percent of a newly constructed project's development costs, less land and certain other costs. Project owners can claim the tax credit award annually on their tax returns for 10 years.
Affordable Housing Program	Project-based: Grant Below-market interest rate loan	1989	Active	Provides grants or reduced-interest-rate loans for the production of affordable rental and owner-occupied housing. Program was intended to expand the Federal Home Loan Bank system's overall involvement in community lending and promote the production of low-income housing.
Section 202 Supportive Housing for the Elderly	Project-based: Capital advance (grant) Rental assistance payment	1990	Active	Provides capital advances to finance the construction or rehabilitation of rental housing for very-low-income elderly households. Capital advances do not have to be repaid as long as the housing remains available for occupancy by very-low-income elderly households for 40 years.
Section 811 Supportive Housing for Persons with Disabilities	Project-based: Capital advance (grant) Rental assistance payment	1990	Active	Provides capital advances to finance the construction or rehabilitation of rental housing for very-low-income persons with disabilities. Capital advances do not have to be repaid as long as the housing remains available for occupancy by very-low-income persons with disabilities for 40 years.
HOME	Multipurpose (project- and tenant-based): Development grant Rental assistance payment Homeownership assistance	1990	Active	Provides formula grants to states and localities. Communities use these grants, often in partnership with local nonprofit groups, to build, buy, and/or rehabilitate affordable housing for rent or homeownership or to provide tenant-based rental assistance to low-income households.
HOPE VI	Project-based: Operating subsidy Grant	1993	Active	Provides grants to public housing authorities to transform severely distressed public housing sites into economically viable communities and to support service programs.

(Continued From Previous Page)

Program	Type of subsidy	Year authorized	Status	Description
Housing Choice Voucher Program	Tenant-based: Rental assistance payment	1998	Active	Aids low-income households to rent housing units in the market. Public housing authorities have discretion to set voucher payment standards anywhere between 90 and 110 percent of the local fair market rent. HUD pays the difference between the payment standard (or, if less, the unit's rent) and the total tenant payment, which is usually at least 30 percent of adjusted household income. If the unit's rent exceeds the payment standard, the tenant can pay the difference, provided that household initial rent burden does not exceed 40 percent of adjusted income.

[a]The subsidy is provided by another housing program.

Source: GAO adaptation of the analysis in *Current Housing Problems and Possible Federal Responses*, Congressional Budget Office (Dec. 1988).

Federal Expenditures on Housing Programs

An outlay is generally a payment of an obligation incurred, representing federal spending for programs at a particular time. In fiscal year 1999, the federal government provided housing assistance to about 5.2 million renter households at a cost of about $28.7 billion in budgetary outlays and tax credits. This assistance was delivered through both tenant-based and project-based programs. Since federal outlays cover expenditures for everything from development to rental assistance and since the timing of these outlays varies, using federal outlays to compare per-unit costs across programs would be misleading. Nevertheless, outlays are useful as indicators of federal spending for programs at a particular time. Determining how much the federal government spends each year to assist households under a particular program is complicated when units or households benefit from more than one subsidy.

Defining Budgetary Outlays

An outlay is generally defined as the payment of an obligation incurred in a previous year or in the same year. Although outlays measure federal spending for programs at a particular time, they do not represent, nor were they intended to represent, the total costs of housing to all parties, including state and local governments, private entities, and assisted households. For assisted housing programs, outlays cover the federal costs. More specifically, for housing vouchers, outlays cover the cost of the tenant-based rental assistance provided to low-income households and the fee paid to local housing authorities for administering the program. For housing production programs, outlays pay for a broader range of activities that vary by program, from the project-based rental assistance provided for the Section 8 New Construction and Substantial Rehabilitation program to the operating, capital improvement, and debt-service subsidies provided for public housing.

Program Outlays for Fiscal Year 1999

Table 21 presents the outlays for housing assistance programs administered by HUD and RHS. Also included are the estimated forgone taxes for the Low-Income Housing Tax Credit program administered by the Internal Revenue Service. The table categorizes these programs as inactive or active. Whereas the outlays for inactive programs support existing units and do not currently fund the production of any new units, the outlays for active programs provide assistance to previously built units while continuing to fund new units of affordable housing. Within both the inactive and active project-based categories, an assisted property can be

privately or publicly owned. In the case of vouchers, assistance is provided to the tenant.

Table 21: Federal Outlays for Major Assisted Housing Programs in Fiscal Year 1999

Program	Total units funded as of FY '99	Operating subsidy/Rental assistance (in millions)	Development/ Modernization (in millions)	Total outlays (in millions)	Operating subsidy/ Rental assistance per unit[a]
Inactive					
Publicly owned, project-based					
Public Housing	1,273,500	$3,860[b]	$3,080	$6,940	$5,450
Privately owned, project-based					
Section 8 New Construction/Substantial Rehabilitation	643,600	4,320	-	4,320	6,710
Section 202 Elderly and Disabled Housing Direct Loan	207,100	1,190	-	1,190	5,750
Section 8 Property Disposition	60,300	360	-	360	5,970
Section 8 Loan Management Set-Aside	409,000	1,650	-	1,650	4,030
Rent Supplement	20,900	60	-	60	2,870
Section 236	464,000	610	-	610	1,310
Section 221(d)(3) Below-Market Interest Rate[c]	145,000	-	-	-	-
Active					
Tenant-based					
Section 8 Certificates/Vouchers	1,580,500	7,010	-	7,010	4,440
Publicly owned, project-based					
Public Housing: HOPE VI[d]	-	-	320	320	-
Privately owned, project-based					
Section 202 Supportive Housing for the Elderly	65,500	80	500	580	1,220
Section 811 Supportive Housing for Persons With Disabilities	17,800	20	110	140	1,120
Section 515 Rural Housing Rental Assistance	484,700	-	90	90	-
Section 521	264,700	560	-	560	2,120
Low-Income Housing Tax Credits[e]	700,000	-	3,500	3,500	-
Multipurpose					
HOME Investment Partnerships Program[f]	-	-	-	1,350	-
Total	**5,247,300[g]**	**$19,710**	**$8,950**	**$28,670**	**-**

Note: Figures may not add due to rounding.

[a]Per-unit calculations cannot be done for outlays used to construct new units because outlays for one particular year do not correspond to the number of units actually placed in service that year. Only rental assistance is included in the per-unit cost estimates, with the exception of Public Housing (see note b).

[b]Outlays for operating expenses include $2.9 billion in operating subsidies, $705 million in annual debt service payments on the costs of developments constructed before 1974, and $283 million for the Drug Elimination program. The outlay per unit for public housing's operating subsidy is $2,260. Outlays for development and modernization under HOPE VI are broken out separately from those for Public Housing.

[c]Interest rate subsidies were made at closing and accordingly would not be reflected in 1999 outlays.

[d]As of 2000, the HOPE VI program had demolished over 30,000 units and constructed over 7,000 units of public housing units.

[e]Since there is no official estimate of the number of units developed under the Low-Income Housing Tax Credit program, we relied primarily on estimates from HUD's National Low-Income Housing Tax Credit database.

[f]Because reliable data were not readily available, this table excludes substantial numbers of commitments made through the HOME Investment Partnerships Program. In addition, HOME funds can be used for tenant-based assistance or assistance to new homebuyers. These funds can also be used for acquisition, rehabilitation, or in limited circumstances, construction of both rental and owner-occupied housing.

[g]The total number of units is adjusted to account for cases in which one particular unit may be receiving subsidies from two different programs. For instance, approximately 40 percent of tax credit units receive Section 8 project-based or tenant-based assistance.

Source: GAO analysis of agency data. Forgone taxes resulting from the Low-Income Housing Tax Credit program are from *Estimates of Federal Tax Expenditures for Fiscal Years 1999-2005*, prepared by the Joint Committee on Taxation for the House Committee on Ways and Means and the Senate Committee on Finance.

Overall, rental assistance accounted for nearly $15.9 billion of the $28.7 billion in federal outlays and tax credits for the major housing assistance programs in fiscal year 1999. Operating and other related subsidies for public housing cost another $3.9 billion. The remaining $9 billion covered $3.1 billion for public housing capital and management improvement efforts, $3.5 billion in forgone tax revenue for the development of affordable housing under the tax credit program,[48] and $2.4 billion in subsidies for the development of affordable housing under the other active housing programs. In other words, nearly 70 percent of the 1999 federal expenditures provided for rental assistance of existing units, and the remainder was used to develop additional units of affordable housing.

[48]While forgone tax revenue is not a budgetary outlay, we include its estimated value in table 21 because it represents a significant cost to the federal government for what is currently the largest program supporting the development of affordable housing.

Problems With Comparing Program Outlays

Because the annual federal per-unit outlays for different housing programs often cover different housing costs, they should not be used to compare subsidy costs across programs. For example, the annual federal per-unit outlays for housing vouchers cover all of the government's costs. By contrast, the annual outlays for the housing production programs often do not include all of the subsidy costs. Specifically, they may not include—nor were they intended to include—the up-front development costs paid in previous years when properties were built; the indirect costs of forgone taxes to federal, state, or local entities; or the costs of funding capital replacement reserves.

Computing the costs of federal housing assistance programs is further complicated when subsidies overlap—that is, when rental assistance is combined with development subsidies to make units affordable for very-low-income households, both in older and in newly developed properties. We estimate that about 1.1 million households receive overlapping subsidies. Specifically, we estimate that about 85 percent of the units that received interest rate subsidies under the Section 236 program also receive Section 8 project-based assistance. In addition, according to our September 1999 estimate,[49] about 10 to 14 percent of the households in tax credit units also receive tenant-based housing vouchers. To the extent that rental assistance lowers the costs of serving households in Section 236 and tax credit units, the average annual per-unit outlays understate federal expenditures for those units.

[49] *Tax Credits: The Use of Tenant-Based Assistance in Tax-Credit-Supported Properties* (GAO/RCED-99-279R, Sept. 17, 1999).

Comments From the Department of Housing and Urban Development

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, D.C. 20410-6000

January 10, 2002

OFFICE OF THE ASSISTANT SECRETARY
FOR POLICY DEVELOPMENT AND RESEARCH

Mr. Stanley J. Czerwinski
Director, Physical Infrastructure
General Accounting Office
Washington, DC 20548

Dear Mr. Czerwinski:

This is in response to your letter of December 20, 2001 to Secretary Martinez concerning the GAO report, "Federal Housing Assistance: Production Programs Cost More Than Vouchers but Respond to Broader Objectives." Thank you for the opportunity to review and comment on this draft report.

The draft report addresses a critical question: what are the relative costs of the different Federal rental housing subsidy programs? As these programs are administered by multiple Federal agencies and, in the case of the tax credit program, by state agencies as well, the process of gathering data for this report was quite challenging. GAO is to be commended for its hard work in pulling together the various data sources needed for this important analysis.

Although the draft final report contains much useful information, it has a number of serious limitations that should be addressed before the report is finalized. In its present form, it does not provide all of the information on costs that policymakers need to make informed decisions regarding the nation's low-income housing programs.

1. Federal Costs to Serve Households of Similar Incomes and Size

From the perspective of Federal policymakers, the most important housing cost question is the following: *how much does it cost the Federal government to provide housing to a particular household through each of the various housing programs?* To answer this question, it is essential to control for household income, as families with higher incomes require less of a subsidy to ensure that they can afford their housing costs. It is also important to control for unit size, as construction costs and rents tend to vary by unit size.

Although the report recognizes and addresses the need for adjustments for unit size – though see below our comments on this issue – it falls short on the critical issue of adjustments for income. The report devotes only two paragraphs (on page 21) to discussing Federal costs as adjusted for income. These paragraphs contain examples of how voucher costs compare to the costs of selected production programs after adjusting

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for income, but do not provide data for all programs.[1] Moreover, data are provided only for one-bedroom units, and not for two-bedroom units or larger units. Finally, in contrast with earlier sections, there are no graphics displaying this information.

Given the central importance of this issue, these omissions should be corrected in the body of the report. The information is too important to be relegated to an appendix.

Recommendations

See comment 1.

- The section of the report on Federal costs, as adjusted for income, should be expanded to provide data on each program, for both one- and two-bedroom units.[2]
- As it does for the other comparisons presented in the report, the report should include graphics displaying the results of this comparison.
- In view of the fundamental importance of this issue for Federal policymakers, GAO should consider moving this discussion up to an earlier section of the report.

2. Total Federal, State, and Local Government Costs, as adjusted for income

Another valid way to ask the question addressed in the prior point is as follows: *what is the total Federal, state and local government cost to provide housing to a particular household through each of the various housing programs?* This approach differs from that of the prior point in that it includes State and local government costs as well as Federal costs. Given the trend towards shared responsibility for social welfare programs across Federal, State and local governments, this approach is increasingly relevant to policy decisions.

Although the report does include a brief discussion of non-Federal and non-tenant costs, it does not include a comparison of total government costs, as adjusted for income.

See comment 2.

Recommendation

- Add a discussion, table and graphic, comparing the total government costs for each program, as adjusted for income and unit size.
- Note within this discussion the fact that the data on the costs of the production programs do not include many of the administrative costs of these programs – for example, the costs to states of administering the low-income housing tax credit program. By contrast, the full administrative costs of vouchers are captured.

[1] A sentence on page 21 states that "Table 5 in Appendix I presents the 30-year Federal costs for each of the production programs, for both one- and two-bedroom units." We assume this reference is to Tables 9 and 10, rather than Table 5. Even so, these Tables do not appear to control for income.

[2] As noted in point four, below, it would also be useful to produce a single unit-adjusted figure.

3. The Projected Cost of Production Programs

One important issue that should be discussed at some length in the body of the report is the likelihood that the report systematically *underestimates* the lifetime costs of production programs. This occurs because the report assumes that the total costs for the production programs over 30 years is equal to the amounts projected at the outset for the programs, with no additional infusion of subsidy. This assumption runs counter to the history of Federal production programs.

The history of prior production efforts indicates that substantial amounts of additional subsidies have generally been added within the first 5, 10, or 15 years after these programs were initiated. For example, project-based Section 8 and Flexible Subsidies were provided to many properties initially funded with subsidized mortgages under the Section 236 and Section 221(d)(3) BMIR programs. A more recent example of a later subsidy being added to an earlier production program is reflected in GAO's earlier finding that about 27 percent of units provided with a low-income housing tax credit (LIHTC) between 1992 and 1994 also had project-based Section 8 subsidies. Still another example is the Mark-up-to-Market program that is increasing compensation to owners of Section 8 project-based developments as their initial 15-20 year contracts expire. Looking forward, it is quite likely that current LIHTC projects will seek additional subsidies once their initial 15-year compliance period expires.[3]

Despite the inclusion by HUD of a comment to this effect on the interim report, the final report does not address this issue in a satisfactory fashion. HUD recognizes that there are a number of different ways to adjust the cost estimates to reflect the likelihood that additional subsidies will be provided, raising the costs of production programs relative to vouchers. For example:

- The approach suggested in HUD's comments on the interim report was to provide cost estimates over a shorter time period such as 15 years, in addition to the 30-year estimates. This models the eventuality that additional subsidies are provided within the initial 15-year period such that it is no longer accurate to assume that the initial costs are amortized over a 30-year period. The 15-year model also has the advantage of reducing the uncertainties associated with extrapolating from a limited sample of properties and averaging development costs.[4] The longer one

[3] Even if the owners do not come forward and request additional tax credits or funds, there may be a need to infuse additional funds into LIHTC projects simply to maintain the project in satisfactory condition. Once the investor has taken all of the tax credits (10 years) and the tax credits are no longer subject to recapture (15 years), some investors may choose to increase short-term returns at the expense of long-term sustainability by, for example, foregoing maintenance or seeking ways to opt out of the program's 30-year extended use requirement.

[4] For Vouchers, the data on rents and tenant incomes come from the full universe of 1,580 million units. National level data on LIHTC properties comes from a sample of properties placed in service between 1992 and 1994 used for a 1997 GAO study supplemented by a larger private sample of LIHTC properties funded between 1987 and 1996. Together, this represents a substantial number of LIHTC properties although costs had to be extrapolated to 1999.

looks into the future, the more one compounds initial estimation errors. A 15-year estimate would involve less compounded error than a 30-year estimate.

- Another approach would be to retain the 30-year time frame but model the infusion of additional funds for production programs through other means, such as by substantially increasing contributions to a reserve. The current draft includes in an appendix a "worst-case" estimate for understating the costs of production programs by assuming that properties receive a full property tax abatement and provide no funding to reserves estimated to be $600 per unit/per year. This may not be a worst case estimate at all, as recent HUD studies on public housing and on FHA-insured rental housing suggest that annual accruals of capital needs may be as high as $1,100 to $1,700 per year.[5]

  This suggests that if one is looking to get a better handle on the upper bound of likely production costs, it may be necessary to model much larger contributions to reserves than $600 per unit per year. One approach would be to look at the costs assuming $1,000 per unit per year. Any range of accrual estimates is subject to considerable uncertainty, but a higher range would have a significant cost impact. Accrual need is only one of the types of uncertainties associated with doing projections 30 years into the future.

See comment 3.

Recommendation

- Add to the body of the report a section discussing the history of additional infusions of subsidy into Federal production programs. This discussion should note that, if this practice is followed with respect to the current production programs, the costs over 30 years will be substantially higher than projected in this report.

- Develop additional cost estimates that model the cost relationship among the housing programs assuming the historical pattern is followed and additional funds

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However, the numbers of units and properties for the remaining programs are very small and generally reflect only one year of funding; the number of units Section 515 was only 1,250 placed in service in 1998. The small size of the universes and using an average development subsidy rather than adjusting for bedroom size can result some very anomalous findings. For example, the first-year or 30-year costs of one-bedroom and two-bedroom Section 515 units are essentially the same: $6,930 as compared to $7,010 and $125,520 as compared to $125,810, respectively (page 39).

Projecting total costs 30 years into the future or even annualizing development costs over such a long period given the small number of properties used is fraught with uncertainty. GAO might consider using properties from several years, but this would take considerable time and given its cited limitations on the availability of data fraught with its own extrapolation issues. Adding a cost comparison over a shorter time frame is simpler and provides another way of looking at costs among programs.

[5] The "Capital Needs of the Public Housing Stock in 1998" study concludes that the average annual accrual per unit for existing public housing is almost $1,700 on a present value basis. The "Status of HUD Insured (or Held) Multifamily Rental Housing in 1995" study concludes that average annual accrual per unit for existing HUD insured units is about $1,100 on a present value basis.

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are made available for the production programs. As noted above, this can be done in a number of different ways, including through a 15-year cost comparison and/or through the modeling of larger contributions for capital needs. A discussion of the results of this analysis should be included in the body of the report.

4. Adjustments for Unit Size

One feature of the interim GAO report on costs that was quite helpful was the use of a single cost figure for comparing costs across programs. This cost figure adjusted for variations in the unit mix of the different programs, as well as for tenant income.

The final report, by contrast, takes a very different approach. In addition to omitting a table adjusting for tenant income – see above – the body of the report does not include a discussion of costs as adjusted for unit size. (These data are included in Table 5 in Appendix I, but not given any prominence in the report.) Instead, except with respect to HOPE VI, the report provides costs separately for one-bedroom and two-bedroom units.

The approach of providing costs separately for different bedroom sizes – if done accurately – has some advantages. Specifically, it can flag any differences in the cost relationships at different unit sizes. One problem, however, is that the report does not include a discussion of the costs of providing housing larger than two bedrooms. This is a significant omission given the housing problems of larger families. In addition, it appears that GAO has averaged development costs across all units for the production programs, making it quite difficult to break out costs by bedroom size. This suggests that a single unit-weighted cost figure may be more accurate.

To address these issues, HUD has the following recommendations:

Recommendations:

See comment 4.

- In addition to providing cost comparisons for particular unit sizes in the report, provide a comparison that adjusts for unit size taking all available data into account. With respect to total costs, these data already appear in Table 5 of Appendix I, so it should not be difficult to include a discussion of these data in the report.

  It would also be useful to provide such a comparison that also adjusts for income. These data are not yet in the final report (though they were in the interim report).

- Discuss the results of the cost comparisons for unit sizes greater than two-bedrooms.

5. Program Characteristics Other than Cost

The subtitle of the draft report, "Production Programs Cost More Than Vouchers but Respond to Broader Objectives," implies that the report will be comparing Federal housing programs with respect to both cost and other objectives. The report itself, however, focuses primarily on cost issues. While some of the "broader objectives" of production programs are described on page 4 – to quote: "[production programs] can directly increase the supply of affordable housing, accommodate special needs, or revitalize distressed communities." – the report does not actually assess whether production programs do a good job at responding to these broader objectives. Nor does it address in a thorough way the benefits of housing vouchers beyond cost savings. (The same point applies to page 23, where assertions are made about the relative benefits of vouchers and production programs, without a thorough supporting analysis.)

This is not so much a weakness in the report as a weakness in the title and the expectations it creates, and in some of the language used to discussed differences among the programs. Given the difficulty of accurately comparing costs across programs, it is sensible to focus on this issue and leave a detailed investigation of the different objectives served by the various programs to another report. Rather than implying that the report assesses the extent to which the different programs meet non-cost objectives, the report would be better off modifying the title and text to clarify that the discussion of non-cost issues reflects only assertions or assumptions about the potential benefits of different programs.

To the extent that a discussion of the different objectives of the various housing programs is maintained, it would be useful to present this discussion in a non-comparative context. In other words, rather than concluding (without any real proof) that production programs respond to "broader" objectives than the voucher program, it would be preferable to state that the various programs have the potential to accomplish different objectives.

For example, in addition to simply putting a roof over families' heads, the voucher program has the potential to:

- Expand the housing options of low-income families by allowing them to move and keep their subsidy. For example, families can use their vouchers to move closer to the location of a prospective job.
- Adapt to changing housing needs over time through the flexibility to attach vouchers to specific developments or to use vouchers for homeownership.
- Provide housing to a wide range of different family types and sizes and accommodate changes in the composition of housing programs that result from changes in local admissions preferences.

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- Help to reduce the rent burdens of households that rent in place, including elderly households and persons with disabilities who may not wish to move.

- Leverage modest improvements to the housing stock by providing an incentive for landlords to fix up their apartments to meet housing quality standards.

Production programs, as the report briefly notes, have the potential to achieve other objectives, such as the following:

- Provide housing opportunities suitable to the needs of special populations, such as the elderly and disabled.

- Facilitate the provision of place-based supportive services to populations of low-income families with particular needs;

- Address the needs of larger families, who may have difficulty finding large rental units in the private market.

- Address severe systemic local shortages of supply of multifamily housing.

- Contribute to community revitalization efforts.

Neither set of objectives is necessarily broader than the other. They are simply different.

Recommendations

See comment 5.

- While a section discussing the different objectives that could be served by various production and voucher programs is appropriate, it should be presented in a non-comparative context. There is no basis in the report to conclude that production programs respond to "broader" objectives than the voucher program. They are simply different objectives.

- Include a more robust discussion of the non-cost benefits of the voucher program, including the points listed above.

In addition to the points discussed above, more specific comments are provided as an enclosure to this letter.

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Thank you for considering our comments in preparing the final report on this important subject.

Sincerely,

Lawrence L. Thompson
General Deputy Assistant Secretary
for Policy Development and Research

Enclosure

The following are GAO's comments on the Department of Housing and Urban Development's letter dated January 10, 2002.

GAO Comments

1. As suggested in HUD's comments, we have expanded the discussion of federal costs in the letter and included figures 10 and 11 on the differences in the federal costs of production programs and vouchers for one-bedroom units. Detailed data on federal costs are still included in appendix I.

2. Contributions from state and local sources are generally a small share of the 30-year total costs of housing programs. Nonetheless, given the emphasis placed on leveraging nonfederal funding by many of the programs, we have incorporated a brief discussion of the total government costs of the various housing programs, as suggested in HUD's comments. We have revised the draft to clarify that the administrative costs of the production programs are not fully accounted for because of data limitations.

3. We recognize in our report that if current set-asides for future capital improvements were insufficient, our estimates of total costs will be accordingly understated. To address the issue of underfunded capital reserves, we revised the draft to include two additional scenarios evaluating the possible impact of shortfalls above and below our initial base estimate. We find that over 30 years, these shortfalls make up a small part of the average total costs.

   HUD also comments that the history of federal housing programs indicates that additional subsidies are often required within the first 15 years to maintain the physical and financial viability of subsidized properties. We have revised the draft to include a note citing two studies prepared for HUD that estimate the capital needs of public housing and FHA-insured properties. However, the extent to which the experience of the older programs reviewed in these HUD studies is a good predictor of the future requirements of newer programs, such as tax credits, Section 202, or Section 811, is simply not known. For this reason, we refer to the importance of having current data on the financial condition of these properties.

   We disagree with HUD's suggestion that we shorten our cost period to 15 years because, in general, development subsidies buy more than 15 years of affordable housing.

4. We focused on one- and two-bedroom units because the large majority of units (over 75 percent) developed under the production programs (except HOPE VI) have either one or two bedrooms. Nonetheless, we revised the draft to include cost estimates for three-bedroom units for the tax credit and voucher programs—both of which had sufficient data for this analysis. As noted in this report, data for three-bedroom units were not available for the other programs.

   Single unit-weighted cost figures were presented in our interim report (July 18, 2001) and are also presented in appendix I. We believe that our cost estimates in this report control for differences in unit size more rigorously than the single unit-weighted estimates. HUD states that we averaged total development costs evenly across units of different sizes, thereby reducing the accuracy of our cost estimates in the letter. In reality, we averaged total development subsidies across all units. For tax credits and Section 515, total development subsidies are less than total development costs, which means that the unsubsidized portion of total development costs is captured in the rents, which account for about 70 percent of the 30-year total cost estimates. In the case of grant programs, such as Section 202 and Section 811, the total development cost is completely subsidized. However, these two programs tend to develop properties that comprise units with the same number of bedrooms.

5. We agree that vouchers also respond to objectives other than providing affordable housing. We have revised the draft to include a discussion of these benefits and changed the title of this report so as not to imply that we have assessed how well production programs meet their stated objectives.

Comments From the U.S. Department of Agriculture

Note: The GAO comment supplementing those in the report text appears at the end of this appendix.

United States Department of Agriculture
Rural Development

Rural Business–Cooperative Service • Rural Housing Service • Rural Utilities Service
Washington, DC 20250

JAN 14 2002

TO: Stanley J. Czerwinski
Director, Physical Infrastructure
United States General Accounting Office

THROUGH: Sherie Hinton Henry Sherie Hinton Henry 1/10/02
Director
Financial Management Division

FROM: Michael E. Neruda ME Neruda
Deputy Under Secretary JAN 14 2002
Rural Development

SUBJECT: United States General Accounting Office Draft Report, GAO-02-76, Federal Housing Assistance: Production Programs Cost More Than Vouchers but Respond to Broader Objectives

We appreciate the opportunity to provide comments on the draft report, Federal Housing Assistance: Production Programs Cost More Than Vouchers but Respond to Broader Objectives. We believe the overall report fairly compares the federal multi-family housing production programs with vouchers. Our comments on specifics in the report are as follows:

The title of the report accurately reflects one of the major problems of comparing only the costs of the different programs and not the objectives. Vouchers can be a less expensive method of housing low- and very low-income households. However, vouchers do not produce rental housing where there is no rental housing. Many rural communities do not have existing rental housing available for use by voucher holders. Nor do vouchers ensure that non-federally assisted housing available for use by voucher holders is maintained for long term use by low- and very low-income households. Production programs such as the Rural Housing Service's (RHS) Section 515 programs are used to increase the number of available units. Properties built with Section 515 funds are subject to statutory restrictions that require that the rental units be maintained for use by eligible tenants. Additionally, through RHS's oversight of portfolio properties, the physical condition of the multi-family units is maintained for the life of the loan.

We appreciate the recognition that the RHS Section 515 Rural Rental Housing Program as one of the most efficient federal production programs in operation. The report accurately states that development subsidies for the Section 515 program are lower than

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all other federal production programs with the exception of the low income housing tax credit program. As a reflection of efforts to reduce the government's share of the costs, tenants pay a greater portion of their incomes toward total rent under the Section 515 program than all other production programs except the tax credit program, but are still paying rents less than market. First and 30 year costs for the program are shown to be generally lower than all other programs except vouchers. The report reflects the lower cost of housing in non metro as compared to metro areas. Finally, the report shows that RHS has been successful in obtaining significant partnering from other sources to cover the costs of development of the rental properties produced under the program.

We agree with the statement that further research on the adequacy of production programs' capital replacement reserves would put the federal government in a better position to manage long-term cost risks. Rural Development is considering a portfolio review to determine the adequacy of replacement reserves compared with the properties' long-term maintenance needs.

The statement concerning the need for cooperation and coordination across federal agencies to establish standards for collecting data on housing programs is accurate. Often property owners are required to report to several different federal and state agencies concerning the operation of their properties and the eligibility of the tenants. A standardized reporting format would greatly reduce the complexity and cost of compliance for owners, property managers and government agencies.

See comment.

A final comment is to point out a possible error in Figure 9 on page 20 of the report. The figure shows the average annual income of households served under the Section 515 program as being $8,760. The average adjusted annual income for Section 515 households reported in our January 2001 survey of all occupied units was $7,913, a significantly lower figure than shown in the figure.

Again, we appreciate the opportunity to provide you with our comments on the report.

The following is GAO's comment on the Department of Agriculture's letter dated January 14, 2002.

GAO Comment

We are retaining the estimated annual average income that appeared in the draft report since it is based on data for fiscal year 1998, the year for which we collected cost data from RHS.

Comments From the National Council of State Housing Agencies

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

National Council of State Housing Agencies

January 11, 2002

Mr. Stanley J. Czerwinski
Director
Physical Infrastructure Issues
U.S. General Accounting Office
441 G Street, NW
Room 2T23
Washington, DC 20548

Dear Mr. Czerwinski:

On behalf of the nation's state Housing Finance Agencies (HFAs), the National Council of State Housing Agencies (NCSHA) is grateful for the opportunity to comment on the General Accounting Office's (GAO) draft report: *Federal Housing Assistance: Production Programs Cost More Than Vouchers but Respond to Broader Objectives*. NCSHA's member agencies administer the Low Income Housing Tax Credit (Housing Credit) in all states, Section 8 tenant- and project-based assistance in 42 states, and the HOME Investment Partnerships program in 39 states.

We respect Congress' interest in understanding the costs associated with various federal housing programs. However, we seriously question whether any useful conclusions can be drawn from comparing the costs of production programs with those of tenant assistance programs given that these programs have entirely different objectives and cannot substitute for one another. And, though we appreciate GAO's efforts in preparing this report, we must strenuously disagree both with its methodology and findings. GAO's analysis fails to consider adequately qualitative differences between newly produced housing and voucher-assisted housing and to recognize several critical cost factors associated with each. For these reasons, unless GAO significantly revises its report to take our concerns into account, NCSHA will strongly urge Congress to disregard GAO's findings.

For purposes of developing the detailed analysis which follows, we have focused on the differences between voucher-assisted housing and housing produced with the Housing Credit, currently the largest producer of affordable rental housing and the production program with which we are most familiar.

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The Nation's Affordable Housing Shortage Requires a Supply Response

We are deeply disappointed that the report does not deal in greater depth with the nation's severe affordable housing shortage as context for its discussion of the value of housing production programs. Production programs like the Housing Credit deliver new affordable housing where it is desperately needed and would not otherwise be produced.

As HUD reported in January 2001, "by 1999, for every 100 renter households with incomes below 30 percent of area median income (AMI), there were only 40 units both affordable to and available for rent by them, well below the 47 units per 100 households observed in 1991."[1] The same report concluded that the number of units affordable to renters with extremely low incomes dropped by 750,000 and the total number of units affordable to renters with very low incomes fell by 1.14 million between 1997 and 1999. The Joint Center for Housing Studies of Harvard University found that "[W]ith 4.5 million unsubsidized renters earning less than 30 percent of the area median income, the shortfall in affordable housing for the very poorest now stands at 3.3 million units. These numbers in fact understate the shortage because higher-income households occupy 65 percent of the units affordable to extremely low-income households."[2]

Although GAO's report describes the history of federal housing programs, it does not draw the clear, important inference that Congress authorized and funded these programs to address unique needs and never intended them to substitute for one another. In fact, Congress intended many of these programs to work together to solve different housing problems. Yet, the report fails to recognize the frequency with which tenant assistance is combined with the Housing Credit and other production programs to deliver both the housing and more affordable rents.

Comparing the Cost of Tenant Assistance with Housing Production Is Not Useful

Comparing the cost of tenant assistance to the cost of Housing Credit and other housing production programs is like comparing the cost of a screwdriver to that of a hammer. The screwdriver may cost more than the hammer, but so what

[1] *A Report on Worst Case Housing Needs in 1999: New Opportunity Amid Continuing Challenges*, Office of Policy Development and Research, U.S. Department of Housing and Urban Development, January 2001, p. 8.

[2] *The State of the Nation's Housing: 2001*, The Joint Center for Housing Studies of Harvard University, p. 24.

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if only the screwdriver can do the job. The Housing Credit and other production programs are designed to produce affordable housing where it is most needed and otherwise would not be built. Tenant assistance programs are designed to make existing housing more affordable to low income families. Yet, GAO, in drawing cost comparisons between newly produced and voucher-assisted housing fails to compare adequately the different goals and benefits of these programs.

GAO's Cost-Comparison Analysis is Flawed and Incomplete

Though we question the usefulness of comparing the costs of tenant assistance and production programs and believe it is dangerous to draw conclusions from that comparison about the programs' cost-effectiveness, we understand that Congress asked GAO to undertake this analysis. The remainder of our comment concerns the fault we find with GAO's analysis.

GAO Fails to Adequately Account for Differences in Housing Quality

Although GAO acknowledges that Congress asked it to take into account qualitative differences between housing programs, GAO focused instead on the differences in housing *characteristics*, such as the number of apartments per project and bedrooms per apartment, not housing *quality*. Cost-effectiveness cannot be established without comparing the quality of new housing produced by the Housing Credit and other programs to that of the generally much older housing occupied by voucher-holders.

See comment 1.

- **The Housing Credit produces new, high quality apartments.** The Housing Credit creates new, high quality apartments, constructed in accordance with stringent federal, state, and local standards. In contrast, the average age of a voucher-assisted apartment is 35 years, and in some areas, nearly twice that. Many voucher-assisted apartments were built or last renovated, if renovated at all, before the imposition of energy efficiency, lead paint, and other design and safety standards. Yet, the report draws no inferences from the age of voucher-assisted units and does not consider the cost of maintaining and upgrading older apartments to meet modern standards or the implications of not doing so.

- **Housing Credit properties provide amenities and services.** Resident services and amenities common to Housing Credit properties, such as recreational space, childcare, and job-training facilities, are most often not found in voucher-assisted housing. Housing Credit properties also frequently offer on-site supportive services to families, elderly, and other special needs households who otherwise would have limited access to

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such services in voucher-assisted properties.

- **Housing Credits build housing in difficult-to-develop, often inner city, markets.** Housing Credits make affordable housing production possible in neighborhoods where despite the need, developers otherwise would not build because of the added costs associated with demolition and site clearance, environmental remediation, and tenant relocation. The report makes no attempt to isolate or quantify these additional costs or the resulting benefit—affordable housing in neighborhoods which otherwise would not have it.

- **Production programs like the Housing Credit must comply with stringent federal regulations**. Housing Credit properties must meet more stringent physical accessibility, environmental review, and other regulatory requirements than existing private housing. Compliance with these and other state and local regulations increases development costs. The report does not adequately recognize these costs or the associated benefits.

See comment 2.

- **Housing Credits build communities, not just housing.** Housing Credit properties are often anchors for the revitalization of whole low income communities. Vouchers simply do not have that impact on low income neighborhoods. While the benefits of Housing Credit housing to the broader community may be difficult to quantify, the report should at least acknowledge them.

GAO Fails to Account Adequately for Critical Cost Factors

GAO further compromises its analysis by failing to account adequately for certain cost savings associated with production programs, including longer affordability periods and slower rent increases. In doing so, it invalidates its conclusion that production programs cost more than vouchers. We believe if GAO considered these cost savings, it would find that the cost differences between Housing Credits and vouchers would be minor or nonexistent.

See comment 3.

- **Production programs typically provide affordability for more than 30 years.** The report uses a minimum useful life of 30 years to compare costs of vouchers and production programs. This understates the cost of voucher-assisted housing and inflates the cost of production programs. After all, the GAO itself in its 1997 report on the Housing Credit program found that more than two-thirds of states require affordability of Housing Credit properties for periods well beyond 30 years, and several states require a minimum of 55 years or more.

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The report acknowledges that longer affordability periods reduce program costs compared to vouchers, because the same finite subsidy purchases a longer benefit for the low income residents. Vouchers ensure affordability only as long as annual appropriations continue to renew them and housing exists in which to use them. GAO should have evaluated the cost of the Housing Credit over a more typical affordability period—or at least have shown the sensitivity of its cost estimates to longer affordability periods.

See comment 4.

- **Rent growth is slower for production programs**. The report appropriately observes that rents in production programs are less vulnerable to increases than voucher rents. In projecting future rent increases, however, the report assumes the same annual growth rate of three percent for both vouchers and production programs. This analysis is flawed because rents in newly produced housing do not track inflation in market housing rents. Housing Credit rent increases, for example, are tied to increases in area median incomes, which often lag inflation in market rents.

- **FMR increases make GAO's analysis outdated.** Since the GAO collected its data on voucher costs, HUD has increased the fair market rent in many jurisdictions to the 50th percentile rent from the 40th percentile. This change increases the per voucher costs and means the data GAO relied upon is outdated.

- **Housing supply and demand impacts rents.** Production of new housing adds apartments to local supply, creating downward pressure on market rents. In fact, many Credit apartments rent significantly below the maximum rents permitted by the program due to the influence of market pressures. Vouchers, however, add demand to a fixed housing supply, creating pressure on owners to increase rents. In some markets where housing supply is scarce and market rents are high, owners simply will not accept vouchers because existing payment standards are too low. This effect was discussed in a 1990 article written by former HUD Assistant Secretary for Housing William Apgar, who stated that "[I]n addition, by expanding the supply of rental housing, subsidized new construction programs may limit future rent increases, benefiting not only recipients, but others in the form of reduced rent payments. …[T]he price effects of housing supply programs may be important and certainly must be

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included in any complete assessment of alternative housing assistance approaches."[3]

Other Deficiencies in GAO's Analysis

See comment 5.

GAO states that production programs historically have not required owners to set aside sufficient reserves for major repairs or replacement, thereby driving up maintenance and rehabilitation costs. To account for this under-funding, GAO recommends adequate reserves of $600 per unit per year. While such an amount may be appropriate for a 35-year old voucher-assisted apartment, it is drastically too high for a newly constructed Housing Credit apartment. States underwrite Credit developments using stringent standards that ensure sufficient operating and replacement reserves. GAO cites no credible data substantiating the under-funding of reserves in Housing Credit properties.

We are also concerned that GAO makes little mention of the benefits derived from the combining of vouchers with Housing Credits and other production programs that is sometimes crucial to the successful delivery of affordable housing to very low income families. Housing Credit developments and other newly constructed housing utilize vouchers to make properties affordable for very low income families, the elderly, disabled, and other special needs households. The report does, in fact, acknowledge that 40 percent of Housing Credit tenants receive some form of rental assistance, further reducing their portion of the rent.

See comment 6.

GAO concludes that a national, centralized database is needed to monitor and evaluate the Housing Credit program. While we question the need for such a database given that the Housing Credit is already one of the most exhaustively studied housing programs, we urge GAO and Congress to weigh carefully the benefits of such a database against the reporting burden it would impose on the states.

Finally, the report suggests the need for additional cost-containment measures for housing funding programs. Although it is important for the federal government to reduce unnecessary program costs, the Housing Credit program already requires extremely rigid cost-containment measures that ensure that only the amount of Credit needed to assure long-term viability and affordability of the development is allocated. States underwrite Credit developments by carefully scrutinizing each development's sources and uses of funds, financial projections

[3] *Which Housing Policy is Best?*, William C. Apgar, Jr. in Housing Policy Debate Vol. 1, Issue 1, Office of Housing Policy Research, Fannie Mae, 1990, p. 17.

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of future rental income and expenses, and the availability of other state, local, and private investments.

Let's Get About the Business of Using a Variety of Approaches to Solve Our Housing Needs

Although we recognize the effort that GAO has put into preparing this report, we oppose its use to draw any conclusions about the relative value of various housing programs. We believe William Apgar had it right when he concluded a similar analysis in 1990 with the comment that "[R]ather than continue the futile debate as to whether future housing assistance efforts should involve mostly vouchers or mostly production subsidies, the nation would do well to undertake the business of developing flexible programs that offer appropriate choices to state and local decision makers."[4] This statement is still valid today and best sums up our response to this new report.

We look forward to working with the GAO and the Congress to increase and use wisely the substantial investment in production programs and vouchers that we must make to address the serious housing problems we face.

Sincerely,

Barbara J. Thompson
Executive Director

[4] Ibid., p. 28.

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The following are GAO's comments on the National Council of State Housing Agencies' (NCSHA) letter dated January 11, 2002.

GAO Comments

1. We agree that tax credits tend to produce new or substantially rehabilitated housing units with amenities and services often not provided by the average voucher unit. While new or substantially rehabilitated units may, on average, be of higher quality than the average voucher unit, the age of a unit may not accurately reflect its quality. In addition, the extent to which the benefits from the additional amenities and services justify their costs remains an open question.

2. We agree that there are potential benefits to the broader community from tax credits. These potential benefits were discussed in the housing policy issues section of the draft report.

3. We assumed an affordability period of 30 years throughout the draft. We agree with NCSHA that some properties have longer affordability requirements but note that other properties have shorter affordability requirements as well. In its comments, HUD requested that we present 15-year estimates rather than 30-year estimates. For simplicity, we continue to present 30-year estimates. Additionally, because of the time value of money, projections beyond 30 years will have a small impact on relative costs.

4. Rent growth for production programs may or may not lag behind that for vouchers. The tables presented in appendix II provide the opportunity to consider the impact on rents of other rates of inflation.

5. We agree that the reserves required for new or substantially rehabilitated units may be considerably lower than those required for older properties. HUD raised concerns that our base annual estimate of $600 per unit was too low, given past experience, while NCSHA argues that the figure is too high. To address both concerns, we revised the draft to include two additional scenarios evaluating the possible impact of shortfalls above and below our base estimate. We find that over 30 years, these shortfalls make up a small part of the average 30-year total costs.

6. NCSHA questioned the need for a national database on costs for the tax credit program, arguing that the tax credit is one of the most exhaustively studied programs. Few studies of the tax credit program

have assessed the costs of providing housing under the program, the financial viability of tax credit projects over time, or the households served by the program. Michael A. Stegman's 1999 review attributes our lack of information to the fact that the program is financed by tax expenditures rather than by direct appropriations and therefore does not require annual budget justifications.[50] Additionally, he notes that housing advocates have been reluctant to support independent evaluation of the program. The tax credit program consumes real taxpayer resources, and as with any government program, taxpayers deserve to know what is being purchased with their dollars and at what cost.

[50]Michael A. Stegman, "Comment on Jean L. Cummings and Denise DiPasquale's 'The Low-Income Housing Tax Credit: An Analysis of the First Ten Years': Lifting the Veil of Ignorance," *Housing Policy Debate*, Vol. 10, Issue 2 (1999).

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