THE EARNED INCOME TAX CREDIT AS AN INSTRUMENT OF HOUSING POLICY

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EXECUTIVE SUMMARY

High housing costs present by far the most formidable barrier to safe, decent and affordable housing, vastly outweighing substandard or overcrowded conditions. Frequently these high costs frustrate efforts to bolster working families and ease the transition from welfare-to-work.

And yet, housing costs—the biggest chunk of a working family's budget—have received short shrift in efforts to smooth the transition from welfare to work and to provide additional support to families who are working but earning low wages.

The federal Earned Income Tax Credit (EITC), designed to aid low-income working families and individuals, already plays a role beyond that of an income support. In an era of declining availability of affordable housing, the EITC provides significant relief to households burdened by severe housing costs that consume at least 50 percent of gross income.

Adding to the importance of this relief is the lackluster supply of federal housing aid: Less than one in four qualified households actually receives housing assistance administered by the U.S. Department of Housing and Urban Development, such as Section 8 vouchers.

This paper examines the effect of the EITC on housing-cost burdens currently and analyzes and contrasts three proposals to increase its impact as a housing tool.

In the course of the discussion, the paper finds that:

- By any measure, severe housing expenses for low- and moderate-income households are on the rise. Double-digit increases have been the norm in recent years for a number of metrics, even at the close of the prosperous 1990s.
- If included in income, the EITC significantly reduces critical housing needs for working households. Currently, the EITC reduces the number of households that bear severe housing costs by 18 percent. Because housing affordability is calculated on a gross income basis, these benefits are often overlooked. Even with no change in the credit, efforts to increase participation in the EITC among eligible tax filers could yield meaningful reductions in housing-cost burdens.
- All three proposals to expand and restructure the EITC would reduce the number of households with severe housing costs. A proposal introduced in Congress in 2001 would increase the EITC for childless workers and for families with three or more children, thereby eliminating severe housing-cost burdens for 153,000 households.
- The authors' proposal would relieve severe housing-cost burdens for 510,000 families. Configuring EITC parameters to help renters afford typically-priced units in most major

metropolitan markets would assist families with children most significantly. Like the other proposals, it would also remove a large number of families from poverty.

Overall, expanding the EITC in some fashion would be an effective way to improve housing affordability for millions of working families. Moreover, using the EITC as a housing tool specifically incorporates a work incentive into the assistance. For the private sector, expanded use of the EITC does not increase hiring costs, unlike "living wage" ordinances enacted at the local level.

Despite the prosperity of the 1990s, housing became less affordable for millions of working families. Federal assistance did not increase to meet the need. Indeed, current housing programs may be unable to accommodate the increasing demand. Incorporating an implicit housing benefit into the EITC would begin to reduce the shortfall substantially.

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THE EARNED INCOME TAX CREDIT AS AN INSTRUMENT OF HOUSING POLICY

I. INTRODUCTION

A. The Problem: High Housing-Cost Burdens

High housing expense burdens are a significant and growing fixture of the nation's housing landscape for low- and moderate-income families. To be considered "affordable" under commonly accepted standards in the housing community, housing costs (rent/mortgage plus utilities) should consume no more than 30 percent of income for low- and moderate-income families (Daskal 1998). According to the Joint Center on Housing Studies, 14 million of the nation's 34 million renter households spend at least this amount on housing (JCHS 2002). These cost burdens have overtaken substandard housing as America's principal housing problem.

In this report, we focus on households with "severe" housing-cost burdens—those paying 50 percent or more of income on housing. Researchers, policymakers, and advocates have developed several metrics to measure the incidence of these burdens, all of which point in a similar direction:

- Worst Case Needs (WCN) households (a term coined by Congress) are eligible for assistance under programs administered by the U.S. Department of Housing and Urban Development (HUD), but do not receive such assistance. WCN households are very-low income renters (those with incomes below 50 percent of local area median income) that pay at least half of their income for rent, or live in severely inadequate housing. According to HUD, there were 5 million WCN households in 1999. Over three-fourths (77 percent) of these households lived in adequate, uncrowded housing, but paid more than half their income for rent (HUD 2001).
- The population with *Critical Housing Needs* (CHN) shares characteristics similar to WCN households, but includes homeowners as well as renters. The CHN population consists of low-to-moderate income working families who pay at least half of their income for housing or live in substandard housing.¹ According to the National Housing Conference, more than 4 million working families occupied standard housing in 2001, but paid more than half their income for mortgage or rent (by contrast, less than 1 million families lived in substandard housing alone). This figure was up 30 percent from two years earlier, and 68 percent from 1997 (Lipman 2002).
- The *National Housing Wage* (NHW), created by the National Low Income Housing Coalition, ties measures of local housing costs to wage levels. The NHW is the hourly wage a family must earn so that it pays no more than 30 percent of its household income for the local HUD Fair Market Rent. In 2002, the median housing wage nationwide was \$14.66, up five percent

¹Low- and moderate-income working families are defined as families who receive the majority of their income from wages, and whose annual incomes range from \$10,700 (the equivalent of one full-time worker employed at the minimum wage) to 120 percent of local area median income.

from a year earlier, up 18 percent from 2000, and nearly three times the federal minimum wage (NLIHC 2002).

B. An Inadequate Response

As the housing affordability gap has grown in recent years, Congress has failed to mount a sufficient response through dedicated housing programs. Today, all forms of HUD-administered housing assistance serve less than one out of four households that qualify for aid. At the same time, the stock of permanently affordable housing under HUD oversight continues to dwindle. A massive public housing demolition campaign, and the expiration of long-term subsidy contracts with private owners, are removing affordable units from the market (Stegman 2001).

Funding for tenant-based rent assistance—most notably, the Section 8 rental assistance voucher program—has also fallen short of meeting market demand.² Independent evaluations have shown vouchers to be highly effective in helping to close the affordability gap in markets with an ample supply of decent rental housing. Yet in the 30-year history of the Section 8 program, Congress has funded a total of less than two million portable rental certificates and vouchers. As of September 2000, there were fewer than 1.5 million families with vouchers (HUD 2003). Additionally, vouchers are still largely limited to very low-income renters at a time when nearly 60 percent (2.6 million) of cost-burdened CHN families are homeowners (Lipman 2002, p. 25).

Meanwhile, the queue for federal housing assistance lengthens. A 1999 HUD examination of 40 waiting lists for assistance found several that had been closed due to overwhelming size. Those that remained open contained almost 1 million families, and had grown in size between 10 and 25 percent in one year's time. The average waiting period for Section 8 rental assistance vouchers was 28 months in 1998, but was much longer in some metropolitan markets—ten years in Los Angeles and Newark, seven years in Houston, and five years in Memphis and Chicago (HUD 1999).

C. The Opportunity: EITC as Housing Policy

As the affordability crisis affects an increasing number of families, and the significance of dedicated housing programs declines, tax expenditures that benefit these families grow in importance. Most notably, the value of the federal Earned Income Tax Credit (EITC) has increased dramatically in the last two decades. However, tax benefits such as the EITC are not generally considered as income in calculations of housing-cost burdens (including WCN, CHN, or the NHW), even though they often represent a significant addition to the annual earnings of low-income families.

In this paper, we argue that policymakers should explore the potential of the EITC as an instrument of national housing policy. The EITC is a refundable tax credit for low- and moderate-

² In this paper we refer to tenant-based assistance generally as "vouchers," though such assistance occasionally takes other forms.

income workers, particularly those with children. The credit was created in 1975 to "help offset the Social Security payroll taxes paid by low-income working parents, and to encourage parents to work" (Phillips 2002, p. 1). Since that time, the value of the credit has grown nearly nine-fold in real terms (Carasso and Steuerle 2003). Motivated by the principles that the poor should be exempt from income taxes, and that full-time low-income workers should be able to afford the basic necessities of life for themselves and their families, the EITC was significantly expanded in 1986, 1990, and 1993. Today, it provides more than \$30 billion a year in benefits to 20 million working families (Johnson 2001).

Because it is intended to encourage and reward work, the EITC differs from many other safety net programs in that its benefits initially *increase* with earnings (Figure 1). The structure of the EITC takes the shape of an inverted "U." In the *phase-in range*, the value of the credit increases at a constant rate with each marginal dollar of earnings. In the *plateau range*, the credit remains fixed at a maximum amount even as earned income increases. In the *phase-out* range, the credit's value declines at a constant rate with each additional dollar of earnings, until it reaches zero.

While the shape of the benefit curve for each EITC-eligible class is similar, the size of the various ranges, and the maximum EITC benefit, differ according to family size (Table 1). In particular, because the EITC is designed primarily to assist families with children, the maximum credit amount and the income range over which the credit is available are much smaller for childless workers than for families with children. In tax year 1999 (the year on which this study's analysis is based), the maximum EITC for a childless worker was \$347; for a working family with one child, it was \$2,312; and for a family with two or more children, it was \$3,816—more than ten times that for a childless worker.

	0 Children ^a	1 Child	2+ Children
Phase-in Rate	.0765	.34	.40
Plateau Begins	\$4,530	\$6,800	\$9,540
Plateau Ends	\$5,670	\$12,460	\$12,460
Phase-out Rate	.0765	.1598	.2106
Max Earned Income	\$10,200	\$26,928	\$30,580
Max Benefit	\$347	\$2,312	\$3,816

 Table 1. EITC Parameters, Tax Year 1999

^a For families with zero children, there are also age restrictions: the taxpayer (or spouse if present) must be between the ages of 25 and 65. These restrictions do not apply to families with children. Source: http://www.taxpolicycenter.org/taxfacts/lowincome/eitc_historic.cfm



Figure 1. Structure of EITC in 1999

Source: Internal Revenue Service.

This paper demonstrates that many families who face severe housing-cost burdens benefit from the EITC. In fact, we find that treating the EITC as part of household income would reduce estimates of the number of families who face those burdens. Still, too many families who work and "play by the rules" struggle mightily to cover their housing expenses on low incomes. By expanding our notion of "basic necessities" to include modest but adequate housing, we argue for using the EITC to close a significant portion of the growing housing affordability gap for millions of working families. This would, in turn, relieve pressure on inadequately funded housing assistance programs that are dedicated to expanding supply for special populations like the elderly and disabled or the very poor (Dolbeare 2001, p. 125).

D. Why Not Vouchers?

As noted earlier, research has shown vouchers to be effective tools in reducing housing affordability gaps for low- and moderate-income renter households. Why, then, do we focus on the potential of an income tax credit to assist a similar population? Might the goal of providing adequate, affordable housing be better achieved through a significant expansion in housing vouchers?

For several reasons, we believe that expanding and tailoring the EITC is a more promising strategy for making housing affordable for low-income families. First, relative to the EITC, Congress has shown little appetite in recent years for increasing support for rental assistance vouchers. The sharp rise in the size and benefit levels of the EITC stands in stark contrast to the painfully slow growth of vouchers. Although the annual value of the average EITC is about one-fourth that of the

average Section 8 voucher—\$1,500 vs. \$6,012 (HUD 2002)—more than six times as many families receive the EITC as receive housing vouchers. The EITC in aggregate dollar terms is two and a half times the size of total Section 8 rental assistance (\$30 billion a year versus \$13 billion) (National Council of La Raza 2000; HUD 2002).³

In some metropolitan areas, the disparity between receipt of the EITC and housing vouchers is even more dramatic (Table 2). In 2000, there were at least 15 times as many families earning the EITC as households receiving Section 8 assistance in the Atlanta, Detroit, Miami, and Houston markets. In more expensive West Coast markets such as Oakland, San Jose, Seattle-Tacoma, and San Diego, the ratio of EITC filers to voucher holders ranged between four-to-one and 10-to-one.

Metro Area	Section 8 households	EITC filers (families)	EITC families per Section 8 household
Atlanta, GA	18,900	278,972	14.8
Baltimore, MD	12,797	153,062	12.0
Boston, MA-NH	27,422	227,438	8.3
Chicago, IL	42,218	477,294	11.3
Dallas, TX	17,411	239,672	13.8
Detroit, MI	13,561	232,998	17.2
Houston, TX	13,039	332,244	25.5
Miami, FL	13,586	262,752	19.3
New York, NY	96,400	756,669	7.8
Oakland, CA	23,567	90,145	3.8
Philadelphia, PA-NJ	20,306	281,831	13.9
San Antonio, TX	12,702	154,185	12.1
San Diego, CA	17,548	160,350	9.1
San Jose, CA	10,688	47,878	
Seattle-Tacoma, WA	11,787	88,632	4.5

 Table 2. Earned Income Tax Credit Filers and Section 8 Voucher Households

 Selected Metropolitan Areas, 2000

Sources: Brookings Institution Center on Urban and Metropolitan Policy unpublished data; HUD 2003.

The second reason for our interest in exploring the EITC as housing policy stems from implicit limits in the capacity of the voucher program. Recent experience suggests that the voucher delivery system is incapable of handling an increase in program activity that would be required to effectively deal with the recent escalation of housing affordability problems. Although the situation is improving, HUD finds that about one-fourth of all voucher programs across the country have substandard lease-up rates (i.e., less than 95 percent; HUD 2002). Moreover, even when agencywide lease-up rates are high, large numbers of families with vouchers often cannot use them. Nationally in 2000, about thirty percent of families with vouchers in large metropolitan areas had to

³ Even if we expand our comparison to include the more than 4 million low-income households receiving any kind of low-income housing assistance, whether or not they have any earned income, the EITC remains a much larger program.

turn them back in because they could not find housing that both met their needs *and* program standards in the time allotted to them. This is a marked increase from a decade ago, when the turn-back rate in large metropolitan areas was 19 percent (O'Hara 2002).⁴

The declining willingness of property owners to rent to voucher households also acts to constrain significant increases in the size of the program (Sard 2001).⁵ One recent study found that approximately half of Chicago "landlords refused to rent to testers posing as apartment seekers when the 'renter' told them they would use a [Housing Choice] Voucher to pay rent, despite the fact that such behavior violates the city's fair housing laws (Valerie Denney Communications, n.d.).

State and local agencies have recognized this problem in recent years. In 2002, Fairfax County, VA, decided not to ask HUD for additional vouchers "because there were not enough apartments for people already in the program." (Kunckle 2001). In California, the State Senate Judiciary Committee noted a "...growing trend among landlords to flatly refuse to rent to anyone on Section 8 housing, or more blatantly, to evict an existing Section 8 tenant because the landlord no longer wants to accept Section 8 vouchers" (*Housing Law Bulletin* 2001). This practice has led to a precipitous decline in housing access in Los Angeles. According to the director of the city's Section 8 program, the share of all voucher holders who are able to find landlords who accept vouchers has fallen by more than half—from 90 percent three years ago, to just 41 percent today (Stewart 2001).

Ironically, one of the voucher program's historic strengths is implicated in its growing unpopularity with landlords. Housing vouchers were traditionally lauded for delivering the subsidy directly to landlords—so that even if the family portion of the rent was late, the government's portion of the rent would be received on time. Today, according to the trade organization of realtors, "while tenants may pay their portion of the rent in time, [because of local administrative problems] the government's share of the payment is often delayed" (National Association of Realtors 2001, p. 1). It is difficult to imagine that the situation would improve subsequent to a significant expansion of rental vouchers.

Unlike a voucher subsidy, the EITC goes directly to a working family. This direct delivery system not only enhances family choice, but since the tax credit is indistinguishable from work-related earnings, it also can minimize the type of discrimination discussed above.

⁴ Turn-back rates should not be confused with overall voucher utilization rates because vouchers not used by the original recipients are available for use by other families, which means that housing authorities can simultaneously experience high utilization rates and high turn back rates. Both rates are affected by program features, family demographics, management practices, and local housing market conditions, among others. The most recent data indicate that overall voucher utilization rates approached 91 percent in fiscal year 2001, and the overall spending rate was about 95 percent (e-mail correspondence with Will Fischer, Housing Policy Analyst Center for Budget and Policy Priorities, November 1, 2002).

⁵ Landlord unwillingness to accept vouchers was identified as a primary cause of lease-up problems in large housing authorities in a survey of members by the Council of Large Public Housing Authorities.

The third advantage we note that the EITC has over housing vouchers is its relatively low administrative cost. Administrative costs for the EITC are estimated to be less than 3 percent of total payments, compared with around 7 percent for housing vouchers (Notice of Annual Factors 2002).

To be sure, any effort to expand the EITC explicitly to relieve housing-cost burdens must consider the timing of credit delivery. Almost since the inception of the program, EITC recipients have been able to receive at least a portion of their anticipated credit in every paycheck (the "advance payment" option). Yet over 98 percent of families receive all of the credit as a lump sum along with their income tax refund (Romich and Weisner 2001).⁶ Families paying half or more of their income in rent clearly cannot afford to wait until the end of the year to receive a subsidy intended to help them with their monthly housing costs. Thus, our proposals to expand the EITC should be coupled with new efforts by the IRS to increase participation in the advance payment option, particularly in markets where significant portions of working families face housing-cost burdens.

For the reasons outlined in this section, we believe that the EITC is a better tool than housing vouchers for dealing with the steep and persistent run-up in housing-cost burdens for millions of lowand moderate-income working families. We believe that the affordability problem has escalated to the point where it can no longer be addressed by housing programs alone. To make significant progress, the problem must be incorporated into a broader "working families agenda" and embraced by a larger and more politically influential community of common interest (Sawhill and Thomas 2001).

E. The Analysis

The remainder of this paper proceeds in five sections plus a technical appendix. Section II explores the EITC's structure and benefit levels, and the housing affordability problems of EITCqualifying families. Section III assesses the impacts of the current EITC on the incidence of housingcost burdens among EITC-eligible families, households with HUD-defined Worst Case Needs, and low- and moderate-income working families. These last two population groups constitute overlapping universes of great concern to housing policymakers.

Section IV, the core of our analysis, presents a menu of possible ways to expand the EITC to better target families with severe housing costs (SHC). We examine three proposals:

 an increase in EITC benefits for childless workers and for families with three or more children—contained in a legislative proposal by Pittsburgh Democratic Congressman William J. Coyne.

⁶ Under the advanced payment option, a family with children is eligible to receive up to 60 percent of their projected total credit. For a one-child family in 1999, this translated to up to \$1,387 with their paychecks (Romich and Weisner 2001).

- a rent-based proposal targeted to individual families with severe housing-cost burdens, put forth by the nationally-recognized housing expert, Cushing Dolbeare (2001); and
- the authors' own proposal based on the national distribution of median housing costs across many markets.

We evaluate the impacts of these proposals in four ways: (1) total costs above and beyond the baseline costs of the existing EITC; (2) the relative decline in the incidence of severe housing costs of various segments of the working poor, including families with children; (3) their impacts on poverty; and (4) targeting efficiency. Our policy recommendations are contained in Section V. A technical appendix concludes the paper.

II. MODELING THE EITC: METHODOLOGY

A. Using the American Housing Survey to Model the EITC

Our paper is based primarily on analysis of the national files from the 1999 American Housing Survey (AHS). We use these data to model EITC eligibility, benefit levels, housing-cost burdens, and related measures. The AHS is the foundation for most national housing policy research, including HUD's Worst Case Needs assessment, Harvard's Joint Center for Housing Studies' *The State of the Nation's Housing* (Joint Center 2002), and the National Housing Conference's continuing analysis of the housing needs of America's working families (Stegman, Quercia, and McCarthy 2000).⁷

We could have pursued our research questions using other data sources, such as the Census Bureau's Current Population Survey (CPS) and Survey of Income and Program Participation (SIPP). The CPS has been used by several researchers to model the effects of the EITC on family and labor market outcomes (Ellwood 2000, Eissa and Liebman 1996), but lacks the geographic specificity we need to differentiate among housing markets. The SIPP is more "EITC-friendly" than the AHS in that it contains more precise information on sources of income, relationships among family members, and length of time in the residence during the survey year—all of which are important criteria for determining EITC eligibility. However, that data source has a far smaller sample size than either the AHS or the CPS, and does not contain information on HUD fair market rents or area median incomes, elements essential to our estimates of the housing impacts of EITC-based policy alternatives.

One challenge in using the AHS to analyze the EITC is that it surveys dwelling units, or households, while the taxable unit for purposes of the individual income tax is the family.

Because a household can contain more than one family, it may thus contain more than one tax unit, or EITC-eligible worker/family. Our AHS data contained 46,589 households, which in turn contained 60,104 families. We define an EITC-eligible household as one that contains at least one EITC-eligible tax unit—such as a single mother and her child. We estimate that in 1999, more than 40 percent of all EITC-eligible households lived in housing units containing more than one family— that is, they were "doubled up." Further, 6 percent of EITC-eligible households in the AHS that year contained more than one EITC-eligible family—roughly 900,000 households and over 1.8 million families.⁸ (Appendix Tables A.2 through A.5)

⁷ We recognize that the historic tendency of the American Housing Survey to underestimate incomes and overestimate poverty when compared to the Current Population Survey, suggests that we might overestimate EITC eligibility and benefit levels relative to CPS-based measures (U.S. Department of Commerce 2002, p. vi). However, despite this bias, we are comforted by the fact that our estimates of average benefits by number of children are within 6 percent of the official IRS numbers (see Table A-1). This suggests that earned incomes reported in the AHS may be understated by the same order of magnitude.

⁸ The reader should be aware that the distinction between families and households requires us to do some analysis using the former and some using the latter. The unit of analysis is clearly marked in each table.

While almost a million households are eligible to receive more than one EITC benefit check, multi-tax-unit households are not necessarily large families, and do not always receive large EITC benefits. In fact, the opposite is more often true. Single-tax-unit households have more than twice the average number of eligible children as multi-tax-unit households, as the latter generally contain one or more EITC-eligible childless workers. Because tax credits for childless workers are much smaller than for families with children (Figure 1), average EITC benefits are generally higher for single-tax units households (Tables A.3 through A.5).

Characteristics of the EITC population in the AHS

Because the AHS data are for 1999, we used 1999 IRS rules for determining EITC eligibility and credit levels. However, our analysis of the policy proposals recognizes certain post-1999 changes in tax policy, such as the partially refundable child credit enacted in the 2002 tax legislation. To qualify for an EITC in 1999, the earned income of the head of household, spouse, if present, and qualifying children had to be:

- greater than \$0 and less than \$10,200 with no children;⁹
- greater than \$0 and less than \$26,928 with one child; or
- greater than \$0 and less than \$30,580 with two or more children.

Although we do not propose to substitute an EITC-based program for housing vouchers or other dedicated housing assistance, it is helpful for policymakers and housing professionals to know the extent to which the two systems overlap. Of the 14.6 million households that contained at least one EITC-eligible tax unit or family in 1999, about eight out of ten had incomes lower than 80 percent of their respective area median incomes, thus placing them squarely within HUD's program limits (Table 3). More than a quarter of all these EITC-eligible households were working adults without children.

EITC-eligible households were distributed pretty evenly across HUD's three most important income categories: 26 percent had incomes lower than 30 percent of the area median, placing them in the extremely low-income group; 28 percent had incomes between 30 percent and 50 percent of area median; and 28 percent had incomes between 50 percent and 80 percent of area median.10

Slightly less than half of all EITC-eligible households are racial/ethnic minorities, with African Americans and Hispanics each accounting for about three million households, or 20 percent of the total pool (Table 4). More importantly, EITC-eligible racial/ethnic groups vary significantly by family

⁹ For families with no children, there are also age restrictions – at least one member of the unit (head or spouse) must be between the ages of 25 and 65. Additionally, married couples are not allowed to file separately. See appendix for additional technical information on eligibility. ¹⁰ These three income groups define certain priorities in the allocation of HUD housing assistance. For

¹⁰ These three income groups define certain priorities in the allocation of HUD housing assistance. For example, currently housing agencies are required to provide at least 75 percent of their housing vouchers to extremely low-income households, while initial incomes of families admitted to public housing are up to 80 percent of median, with the majority falling between 30 percent and 50 percent of median.

size, which has important implications for their average benefit levels. For example, non-Hispanic whites account for almost 60 percent of all EITC-eligible families with no children, but represent less than 40 percent of all working families with three or more children. Conversely, EITC-eligible Hispanic families make up just 18 percent of all childless families but 30 percent of all families with three or more children. Thus, expanding the EITC only for families with children, or only for childless workers, would provide varying benefits by race and ethnicity (Table 4).

Table 3. Total Household Income as Percent of Area Median Income, by Presence of Childrer
EITC-Eligible Households, 1999 (Numbers in Thousands)

Household Income	With Children	Without Children	All Households
<=30% AMI	2,447 (22.5%)	1,347 (35.9%)	3,794 (26.0%)
31-50% AMI	3,434 (31.7%)	617 (16.4%)	4,051 (27.7%)
51-60% AMI	1,687 (15.6%)	166 (4.4%)	1,853 (12.7%)
61-80% AMI	1,877 (17.3%)	411 (11.0%)	2,288 (15.7%)
81-120% AMI	896 (8.3%)	621 (16.6%)	1,517 (10.4%)
>120% AMI	504 (4.6%)	589 (15.7%)	1,093 (7.5%)
Total	10,845 (100%)	3,751 (100%)	14,596 (100%)

Source: 1999 American Housing Survey (AHS) and authors' calculations

Table 4. Number of Children per Tax Unit by Race/Ethnicity of Head, EITC-Eligible Tax Units,1999 (Numbers in Thousands)

Children	Non-Hispanic Whites	African Americans	Hispanics	Other	Total
0	2,914 (58.5%)	871 (17.5%)	876 (17.6%)	319 (6.4%)	4,980 (100%)
1	2,489 (55.8%)	987 (22.1%)	777 (17.4%)	212 (4.7%)	4,465 (100%)
2	1,863 (49.8%)	762 (20.4%)	879 (23.5%)	237 (6.3%)	3,741 (100%)
3+	915 (38.2%)	637 (26.6%)	718 (29.8%)	131 (5.4%)	2,401 (100%)
Total	8,181 (52.5%)	3,257 (20.9%)	3,250 (20.8%)	899 (5.8%)	15,587 (100%)

Source: 1999 AHS and authors' calculations

III. IMPACTS OF THE CURRET EITC ON HOUSING-COST BURDENS

The indices introduced in Section I—Worst Case Needs, Critical Housing Needs, and the National Housing Wage—demonstrate that housing has become much less affordable in recent years for low- and moderate-income families. Yet these measures discount a large and critical source of income for many families who face housing-cost burdens—the EITC. This section examines the degree to which the current EITC, when considered alongside other income sources in calculating housing-cost burdens, serves to reduces the overall incidence of these burdens.

A. The Incidence of Severe Housing-Cost Burdens

Consistent with most housing needs assessments, the primary measure we use to identify the most serious affordability problems is that of severe housing costs (SHC), defined as paying more than half of *household* gross income before taxes for housing.¹¹

We first ask what portion of SHC families might benefit from the EITC. Table 5 provides a rough estimate of this figure. Overall in 1999, the EITC had the potential to reach about 63 percent of working families of all sizes in households with SHC. That proportion differed among different family types. For instance, while childless workers account for 52 percent of all working families who live in SHC households, less than half of these families (44 percent) have gross incomes in the range that qualifies for the EITC (shaded rows). Even for those workers, EITC benefits are small and unlikely to substantially reduce housing-cost burdens.

For families with children, the EITC's broader income ranges and higher benefit levels heighten its potential impact on that group's housing-cost burdens. Between 78 and 87 percent of SHC families with one or more children have incomes in the EITC-eligible range. Together, families with children represent about half of all families with severe housing-cost burdens, and a greater proportion face those burdens (8 percent to 10 percent) than among childless workers (6 percent).

¹¹ For family-level analyses, a family is considered to have SHC if the family lives in a household with SHC. Generally speaking, both housing program income limits and household contributions to housing costs are defined using before-tax measures of household income. Thus, for example, while TANF benefits are counted as income for determining both household eligibility and rent payment in the public housing and Section 8 programs, the EITC is not. Moreover, most low-income housing studies, including HUD's periodic Worst Case Needs assessments, are also based on before-tax measures of household income and neither take account of the EITC nor of payroll or other federal and state taxes the household might pay.

 Table 5. Families Living in Households with Severe Housing Costs by Gross Income and

 Number of Children, Families with Earned Income Only, 1999 (Numbers in Thousands)

Gross Income	Number w/ SHC	Rate	% of Total SHC w/in Child Category	% of Total SHC	
0 Children					
\$1-4,999	735	37.2	23.1	11.9	
\$5,000-9,9999	668	24.8	21.0	10.9	
\$10,000-14,999	548	14.0	17.3	8.9	
\$15,000-19,999	374	9.3	11.8	6.1	
\$20,000-24,999	208	5.5	6.6	3.4	
\$25,000+	640	1.9	20.2	10.4	
Total—Zero children	3,173	6.3	100.0	51.6	
1 Child					
\$1-4,999	266	57.5	22.6	4.3	
\$5,000-9,9999	286	48.1	24.3	4.6	
\$10,000-14,999	268	28.2	22.8	4.4	
\$15,000-19,999	100	10.4	8.5	1.6	
\$20,000-24,999	49	4.7	4.2	.8	
\$25,000-29,999	54	5.8	4.6	0.9	
\$30,000-34,999	46	4.2	3.9	0.7	
35,000+	107	1.3	9.1	1.7	
Total—1 child	1,176	8.2	100.0	19.1	
2 Children					
\$1-4,999	164	67.1	14.7	2.7	
\$5,000-9,9999	164	46.3	14.6	2.7	
\$10,000-14,999	270	37.1	24.2	4.4	
\$15,000-19,999	126	17.5	11.2	2.0	
\$20,000-24,999	62	8.8	5.6	1.0	
\$25,000-29,999	84	11.7	7.5	1.4	
\$30,000-34,999	59	6.4	5.3	1.0	
\$35,000-39,999	31	4.2	2.7	0.5	
540,000+	159	2.0	14.2	2.0	
Total—2 children	1,119	9.1	100.0	10.1	
3+ Childron					
\$1_/ 999	110	60.2	16.0	1.8	
\$5,000-9,9999	1/8	53 /	21.5	2.4	
\$10,000-14,999	133	31 /	10.3	2.4	
\$15,000-19,999	105	22.2	15.2	1 7	
\$20,000-19,999	62	12.2	0.1	1.7	
\$25,000-24,333	42	9.5	<u> </u>	0.7	
\$30,000-23,333	28	5.8	0.0	0.7	
\$35,000-39,999	12	3.1	1 8	0.0	
\$40,000+	47	13	6.9	0.2	
Total—3+ children	687	10.2	100.0	11.2	

Source: 1999 AHS and authors' calculations

B. How Participation Affects the EITC's Reach

While the EITC has the potential to reach a significant number of families with severe housing-cost burdens, IRS-sponsored research suggests that a sizeable portion of EITC-eligible families fail to file taxes, and miss out on the credit altogether. According to the Internal Revenue Service, between 2.3 and 3.4 million EITC-eligible individuals (13 percent to 18 percent of eligible recipients) did not file for the credit in 1996, the most recent year for which this data are available. As a result, these individuals failed to claim between \$2.1 billion and \$3.5 billion (IRS 2002).

The IRS research further finds that the eligible families least likely to receive the credit are from populations at substantial risk for experiencing severe housing-cost burdens. The IRS report found that up to 40 percent of all EITC-eligible non-filers were childless workers, who represent half of all SHC families. Compared to eligible families who did receive the EITC, nonfilers were more likely to be renters, had lower incomes, and were highly clustered, with 40 percent living in just four states—California, Texas, New York and Florida. Not unrelated to the population's geographic location, the researchers also found about a quarter of all nonfilers to have been born in "Hispanic countries."¹²

Several high-cost housing markets had above average nonfiling rates, which had serious financial implications on the budgets of low-income families. For instance, almost 300,000 EITC-eligible workers in metropolitan Los Angeles (28 percent) failed to file for benefits in 1996, as did nearly 23 percent of eligible workers in metropolitan New York (Table 6). More than 71,000 low-income workers in the Washington-Baltimore area (22 percent) failed to file in 1996, as did 59,000 EITC-eligible individuals in the San Francisco Bay Area, one of the highest-cost housing markets in the country. Across the country, the financial value of foregone EITC averaged \$1,025, or about \$85 per month, but those credit values were even larger in a number of high-cost markets—more than \$1,400 in San Francisco (\$119/mo.), and \$1,334 in Los Angeles (\$111/mo.)

In short, even without any new initiatives to further expand the EITC, local efforts to increase filing rates among those already eligible for benefits could help moderate severe cost burdens for a significant number of working families. As we discuss further below, campaigns focused on families with two or more children, who are generally eligible for higher benefits, could make an even greater difference.

¹² Of additional relevance to the housing affordability crisis, the IRS found that low-income workers living in public and assisted rental housing had particularly low EITC participation rates. Roughly 28 percent of EITC-eligible public housing residents, and 25 percent of EITC-eligible workers in other types of assisted rental housing, did not claim the credit. Taken together, about 1.7 million individuals living in public or assisted rental housing were EITC-eligible in 1996, while almost 448,000 failed to file for benefits.

Metro Area (CMSA)	Eligible	Nonfilers	Nonfiling Rate
Los Angeles-Riverside-Orange County, CA	1,058,798	295,679	27.9%
New York City-Long Island, NY & NJ	981,344	220,677	22.5
Houston-Galveston-Brazoria, TX	325,363	97,673	30.0
Chicago-Kenosha, IL & Gary, IN	480,415	93,617	19.5
Philadelphia, PA, Wilmington, DE & Atlantic City, NJ	402,276	87,292	21.7
Washington, DC & Baltimore, MD	330,760	71,675	21.7
Dallas-Fort Worth ,TX	261,349	66,640	25.5
San Francisco-Oakland-San Jose, CA	354,597	59,257	16.7
Detroit-Ann Arbor-Flint, MI	317,993	54,879	17.3
Miami-Fort Lauderdale, FL	279,601	50,482	18.1
Seattle-Tacoma-Bremerton, WA	172,917	45,969	26.6
Boston-Worcester-Lawrence, MA & NH	234,133	39,716	17.0
Total – Top 12 metro areas	5,199,546	1,183,556	22.8%

Table 6. Estimated Number of EITC Eligible Individuals, Nonfilers, and the Nonfiler Rate,Top 12 Metropolitan Areas, 1996

Source: Internal Revenue Service 2002.

Other studies have estimated overall participation rates in the EITC of similar magnitude, though they have not featured the same levels of geographic specificity. For instance, using the Census Bureau's CPS database to estimate EITC eligibility and matching eligibles against IRS filing data, the General Accounting Office estimated an overall participation rate for qualifying households of about 75 percent in 1999 (12.9 million out of 17.2 million) (GAO 2001). Though not without its critics for using "two potentially inconsistent data sets," (Burman and Kobes 2002), the GAO study found participation rates to be highest for families with one or two qualifying children (93-96 percent), and considerably lower for others. According to GAO, only 45 percent of qualifying, childless workers and 63 percent of qualifying families with three or more children claimed the credit.

Liebman (cited in IRS 2002) used CPS and IRS data to analyze EITC participation rates for the 1991 tax year, and found that participation rose with reported earnings—from 70 percent in the phase-in income range, to 83 percent in the plateau range, to 88 percent in the phase-out range.

C. Considering the EITC in Needs Assessments

The income subsidy that the EITC provides may ameliorate some of the more severe housing-cost burdens that families face. In this section, we estimate receipt of the EITC in 1999 among households in the American Housing Survey, and inquire to what extent the tax credit reduces the incidence of SHC and other indicators of housing-cost problems.

We assess the impacts of the EITC on housing-cost burdens for three populations:

• all EITC-eligible households;

- households with HUD-defined Worst Case Needs (WCN); and
- households with Critical Housing Needs (CHN) as defined in the National Housing Conference series (Stegman, Quercia and McCarthy 2000; Lipman 2002).

To be sure, there is considerable overlap between these populations. EITC-eligible households include many with severe housing-cost burdens, and vice versa. WCN and CHN households are defined quite similarly, though subtle differences distinguish the two. Our aim in describing the credit's impact on each is not to belabor the point, but to establish new baselines for how we calculate and understand the housing burdens borne by low-income workers and families.

We conclude the section by considering the combined impact of federal income and payroll taxes—including the EITC—on the affordability of housing for families with and without children.

Before proceeding, it is important to note that our analyses pertain to EITC-*eligible* families and households, not to EITC *recipients*. While we have used IRS data on EITC filers to calibrate our model, we have no way of determining whether each qualifying household in our AHS data actually received the EITC. Since there is no best way to adjust our empirical models to account for actual rather than full participation, our Section IV assessments of how a modified EITC could impact housing-cost burdens consider full participation only. In this section, to give the reader a sense of how current participation in the EITC alters the credit's impacts on housing-cost burdens, we use GAO's reported participation rates to quantify those effects by family size. Thus, tables in this section portray the estimated *actual* impact of the EITC on SHC had all eligible earners claimed the EITC that year.

1. Impact on EITC-eligible workers and families

About 3.9 million low- and moderate-income working families—one in four EITC-eligible families—lived in households with severe housing-cost burdens in 1999 (Table 7). When we factor the EITC into their household incomes, assuming GAO's less-than full participation rates, the overall incidence of SHC declines by 15 percent, or by nearly 600,000 families. The overall incidence of these burdens drops from 25 percent to 21 percent of EITC-eligible families.

Table 7. Impact of the EITC on Incidence of Severe Housing Costs, by Number of ChildrenEITC-Eligible Families Living in Households with Severe Housing Costs, 1999(Numbers in Thousands)

	(1) Before	EITC	(2) Afte	er EITC	(3) Aft Par	er EITC, Full ticipation
	SHC	Rate	SHC	Rate	SHC	Rate
0 Children	1,408	28.3	1,394	28.0	1,380	27.7
1 Child	975	21.9	769	17.2	758	17.0
2 Children	888	23.7	614	16.4	593	15.8
3+ Children	605	25.2	512	21.3	445	18.6
Grand Total	3,876	24.9	3,289	21.1	3,176	20.4

Differences due to rounding

[†]An additional 7,000 ineligible families with no children no longer had severe housing costs due to living with an EITC-eligible family.

Source: 1999 AHS and authors' calculations

Our model shows that, because of differing benefit levels and participation rates, the EITC has very different impacts on the incidence of severe housing costs across family types. For childless families, the combination of low income limits and low benefit levels in the EITC largely negates the credit's reduction of severe housing-cost burdens—only 28,000 of these families overcome severe housing costs with the EITC. At the same time, significantly larger credits and participation rates for families with children reduce the incidence of SHC among EITC-eligible families with one child by 206,000 families (21 percent), and among EITC-eligible families with two children by 274,000 families (31 percent). Because of a lower EITC participation rate among families with three or more children, the credit removes severe housing-cost burdens for only 15 percent of these EITC-eligible families—less than half its impact for two-child families. Nevertheless, our model estimates that the EITC reduces the incidence of SHC for all EITC-eligible families with children by an impressive 15 percent, or 587,000 families.

The EITC's impact on severe housing costs would be heightened at full participation—that is, if all eligible working families claimed the extra income due to them from the EITC. Because of the low participation rates among larger families, boosting participation to 100 percent for qualifying families with more than two children would have the single greatest incremental impact, reducing the incidence of SHC by an additional 67,000 families. We estimate that full participation in the credit across all family types would remove 700,000 families from the ranks of the severely cost-burdened.

To be sure, focusing solely on whether a household does or does not have severe housing costs may serve to understate the impact of the EITC. Another way to assess the credit's efficacy in this regard is to calculate the degree to which the tax credit reduces the median "housing gap" (MHG) for working families. We define the MHG as the amount of additional household income that

a typical severely cost-burdened household would need in order to reduce the percentage of its income spent on housing to 50 percent.¹³

In 1999, the MHG for EITC-eligible households with severe housing-cost burdens was more than \$5,800 for childless workers, and over \$4,900 for households with children (Figure 2). The differences by family type are stark. The EITC had a minimal impact on the housing costs of single adults, reducing the MHG by just over 4 percent; for families with children, it reduced the MHG by a considerable 41 percent.





Source: 1999 AHS and authors' calculations

While they don't appear on the SHC radar screen, families with gross housing costs between 40 and 49 percent of income also carry a heavy burden that the EITC significantly reduces. If all eligible families were to claim the EITC, the number of working households with children paying this much income for housing would decrease by nearly 60 percent, or by 760,000 households (Table 8).

¹³ For example, consider a family with two children that earns \$12,000 per year and pays \$8,000 a year in housing costs. To reduce its housing cost ratio to 50 percent, the family's income must be increased by \$4,000, which is the "housing cost gap." This family would be eligible for \$3,816 in EITC (see Table 1), so the EITC would cover roughly 95 percent of the gap.

	Before EITC	After EITC	
Housing cost ratio category	Households	Households	% Reduction
Households without children			
30-39%	513,000	499,000	-2.7%
40-49%	272,000	251,000	-7.7%
Households with children			
30-39%	1,969,000	1,229,000	-37.6%
40-49%	1,273,000	512,000	-59.8%

Table 8. Impact of the EITC on Housing Cost Ratios,EITC-Eligible Households Only, Full Participation

Source: 1999 AHS and authors' calculations

2. Impacts on Worst Case Needs

As discussed in Section I, HUD defines Worst Case Needs (WCN) households as unassisted renters whose total household income is less than 50 percent of local area median, and who pay more than half their income for rent and/or live in substandard housing. Here we assign estimated EITC benefits to WCN households to determine the extent to which the wage supplement reduces severe housing-cost burdens among this most needy population.

According to HUD, there were about 9.7 million unassisted very low-income renter households in 1999, roughly half of whom had Worst Case Needs (Table 9). Because 36 percent of all WCN households contain no wage earners, and another 34 percent are childless workers whose EITC benefits are very small, the EITC only has the potential to significantly help the 30 percent of WCN households who work and have children. For this reason, the EITC as currently configured can at best have only a modest impact on Worst Case Needs.

Table 9. Worst Case Needs Households, by Earner Status and Presence of Children, 1999(Numbers In Thousands)

	Total	With WCN	Percent with WCN
Unassisted Very Low-Income Renters	9,666	4,779	49.4
Non-Wage Earners	3,432	1,744	50.8
Wage Earners ^a	6,234	3,035	48.7
without children	3,078	1,630	53.0
with Children	3,156	1,405	44.5

^a Wage-earning households are defined as those containing at least one family with earned income. Source: 1999 AHS and authors' calculations

Next, we apply GAO's estimated EITC participation rates by family size, and find that the EITC reduces the overall incidence of Worst Case Needs by about 350,000 households, or just 7 percent—8 percent at full participation (Figure 3). Nearly all of this reduction comes among working WCN households with children, who are eligible for the largest credits. For that sub-population the

credit removes severe housing costs for 25 percent of households. At full participation the impact of the EITC rises to 29 percent of working households with children.



Figure 3. Impact of the EITC on Worst-Case Needs, 1999 (numbers in thousands)

3. Impacts on Critical Housing Needs

Stegman et al. (2000) introduced into the housing needs assessment literature the concept of critical housing needs (CHN)—which applies to a broader range of working households than does HUD's Worst Case Needs.¹⁴ Their universe encompasses all homeowners and renters, including those who receive HUD subsidies and those who do not, whose earned incomes range from a low of \$10,700 (the equivalent of one full-time worker earning the federal minimum wage) to 120 percent of local area median income. Similar to WCN, CHN measures the proportion of this universe that pays more than half of its income for rent or mortgage, or lives in substandard housing.

We would not expect the EITC to have an impact on the incidence of CHN among childless workers, because the lower end of the income threshold for CHN—\$10,700—is above the maximum income limit for childless workers under the EITC, which was \$10,200 in 1999. For working families with children, however, the impact is notable. Overall, there were about 17 million low- and moderate-income renter households in the U.S. in 1999. Excluding EITC benefits, about 12 percent of these households had critical housing needs (Table 10). Current participation in the EITC

Source: 1999 AHS and authors' calculations

¹⁴ Stegman et al (2000), Harkness et al (2002), and Lipman (2002) use the phrase "working families" and households interchangeably when discussing Critical Housing Needs, a practice we do not follow in this paper.

reduces CHN among renter households by 230,000, or about 12 percent; at full participation, the incidence of CHN among this population is reduced 13 percent.

	Before EITC		After EITC		After EITC, Full Participation	
	CHN	Rate	CHN	Rate	CHN	Rate
Low/Moderate-Income Working Renter Households (N=16,580)	1,936	11.5	1,706	10.1	1,681	10.0
Reduction (compared to HUD)			230 ^a		255 ^a	
Percent Reduction			11.9		13.2	
Low/Moderate-Income Working Homeowner Households (N=17,740)	1,812	10.2	1,734	9.8	1,725	9.7
Reduction (compared to HUD)			78 ^b		87 ⁰	
Percent Reduction			4.3		4.8	

Table 10. Impact of EITC on Critical Housing Needs, 1999 (Numbers in Thousands)

^a Current EITC participation levels reduces the number of households with severe housing costs by 243,000, but 13,000 of those also had severely inadequate housing, leaving the total reduction at 230,000. At full participation, SHC is reduced by 268,000.

^bCurrent EITC participation levels reduces the number of households with severe housing costs by 78,000, the entire decrease in critical housing needs. At full participation, SHC is reduced by 87,000. Source: 1999 AHS and authors' calculations

For low- and moderate-income working homeowners, the EITC had a smaller impact on critical housing needs. About 10 percent of these homeowners had CHN in 1999, and the EITC eliminated burdens by 4 percent at current participation, and 5 percent at full participation. Overall then, ignoring EITC benefits overstates the incidence of Critical Housing Needs among lower-income working families by between 310,000 and 340,000 households.¹⁵

4. Impact of Combined Federal Taxes on Severe Housing-Cost Burdens

Consistent with most housing policy research, we have calculated our measures of housing affordability, and the associated impact of the EITC, on a before-tax basis. Because the EITC boosts *after-tax* income, however, it is also useful to examine how all federal taxes—including credits like the EITC—affect housing-cost burdens for low-income working families.

As we explain more fully in the appendix, our model of after-tax housing costs is designed to capture the relevant federal tax provisions that affect lower-income families. These provisions include federal income taxes, including the EITC, as well as the employee's share of federal payroll taxes.¹⁶ The model also includes two relevant post-1999 changes in individual

¹⁵ As with our WCN analysis, the reduction is almost entirely among families with children. The EITC reduces the incidence of CHN among working renters with children by between 31 percent and 35 percent, and among homeowners with children by a more modest 10 percent to 15 percent.

¹⁶ For purposes of this analysis, we assume that all EITC eligible filers take the standard deduction. According to the Internal Revenue Service, in 1999 90 percent of all tax returns from filers with incomes of less than \$30,000, and 94 percent with incomes less than \$15,000, took the standard deduction (IRS 2000). Note that

income taxes: (a) a refundable credit of up to \$600 per child; and (b) a modest expansion in the EITC for married couples with children. To compute after-tax income, then, we deduct 7.5 percent of earnings (the employee share of federal payroll taxes), along with any federal incomes taxes due, from gross income. We then add, where applicable, the EITC and refundable child tax credit to arrive at after-tax income, and re-calculate the percentage of income paid for housing costs.

The most important finding that emerges from this analysis is that the established practice of assessing housing costs on the basis of pre-tax income seriously understates cost burdens among low-income childless workers. For EITC-eligible childless households, federal taxes increase the incidence of SHC from 31 to 38 percent, or by about 250,000 households (Figure 4). Because only a small EITC is available to these workers, the credit offsets their after-tax burden only minimally, eliminating SHC for just 15,000 households.

In contrast, for households with children, we find that the EITC and child credit more than compensate for income and payroll taxes paid, and that after-tax housing-cost burdens are less severe than before-tax burdens. After taxes, 373,000 fewer low-income working families with children bear severe housing costs than before taxes. The net effect of federal taxes and tax credits on all working families is a modest reduction in the incidence of severe housing-cost burdens. About 3.7 million EITC-eligible households pay more than 50 percent of before-tax income on housing, and 3.6 million pay more than 50 percent of after-tax income on housing.

These findings confirm that, in the absence of the EITC and the refundable child credit, several hundred thousand low-income workers and families would pay more than half of their aftertax incomes for housing. They also suggest policymakers might more actively use the tax code to relieve housing-cost burdens—for childless workers, in particular—a topic we examine in greater detail in the next section.

our analysis does not take state taxes into account, which for many low-income families consume a greater share of income than federal taxes.



Figure 4. Effect of Federal Taxes on Severe Housing Cost Burdens, EITC-Eligible Households, 1999

Source: 1999 AHS and authors' calculations

IV. EXPANDING THE EITC TO REDUCE SEVERE HOUSING COSTS

Our analysis confirms that the EITC serves as a powerful tool for reducing housing-cost burdens among low-income working families with children. Among SHC-burdened families with children, the EITC eliminates SHC for one-fourth to one-third of those eligible for the credit. It substantially reduces the incidence of Worst Case Needs among very low-income unassisted renters with children. The credit's impact on housing-cost burdens extends beyond those households with the most severe burdens, reducing by more than half the number of low-income working families who pay between 40 percent and 50 percent of their income on housing.

We argue that the EITC could go farther than it currently does to help erase severe housingcost burdens for a broader group of workers and families. Nearly 2 million low-income working families with children still pay more than half of their income for housing, even after receiving the EITC. Low-income childless workers, in particular, make up more than half of all households with SHC, but benefit only marginally from the current EITC.

In this section, we explore how three options for expanding the EITC impact the incidence of severe housing-cost burdens for lower-income workers and their families:

- The first proposal, embodied in legislation introduced in the U.S. House of Representatives by Congressman William J. Coyne (D-PA) in December 2001, would increase the EITC both for childless workers and for families with three or more children. While not explicitly designed to ameliorate housing-cost burdens, the groups targeted for an expanded credit are among those most likely to face such burdens.
- The second proposal derives from a suggestion by housing policy expert Cushing Dolbeare that the EITC could be designed to "plug the gap" between half of a family's income and its rental payment (Dolbeare 2001).
- We designed the third proposal to help eligible families afford median-priced housing in the bulk of housing markets in the U.S. We consider the distribution of housing costs nationwide, and set parameters for the EITC accordingly.

First, we explain how each proposal works, and how each affects eligibility and benefit levels in the EITC. We then compare the proposals on four measures: their cost; their impact on SHC among eligible families; their impact on poverty; and their "targeting efficiency"—the proportion of increased spending that reduces severe housing-cost burdens. As indicated earlier, our models assume full participation among EITC-eligible workers.¹⁷

¹⁷ Our comparisons also incorporate a small expansion of the EITC for married couples with children. Although this was not actually added by Congress until 2001, we felt that our baseline and proposals should mirror current EITC policy as closely as possible. See the Technical Appendix for more details.

Α. The Coyne Proposal: Expanding the EITC for Childless Workers and Large Families

The EITC was initially designed to relieve tax burdens for families with children. Only in 1993 was a small version of the credit enacted for childless workers, providing them with an effective rebate on the employee share of payroll taxes for the first few thousand dollars of earned income. In 1999, \$700 million, or 2 percent of total EITC, went to low-income workers without children (Greenstein 2000). That year, the maximum credit for a childless family was under \$300, and eligibility for the credit ended at \$10,000 earned income.

Greenstein (2000) has argued that no group of workers needs a tax cut more than lowincome workers without children. He notes that, in addition to paying federal payroll and excise taxes, these workers begin paying federal income tax before their earnings reach poverty level. In addition, Greenstein observes that childless workers are eligible for few if any other government benefits, such as cash, housing, or medical assistance.

Another argument in favor of increasing the EITC for this group is that it might encourage young fathers, especially minority fathers, who largely have been ignored by welfare reform efforts, to join the work force. As Offner and Holzer (2002) note, "progress in encouraging marriage and family formation among welfare families will depend, in part, on the ability of young men to find jobs." Yet today, Offner and Holzer calculate that only about half of the nation's one million African American 16 to 24 year-old high school dropouts are employed, compared to more than 60 percent 20 years ago. Raising the return on low-wage labor by increasing the childless worker EITC could induce more young men without dependent children to join the labor force.

A bill sponsored by Congressman William Coyne in the 107th Congress (H.R. 3574) would increase EITC benefits for all families, particularly those with no children and those with three or more children. The proposal makes four major changes to the structure of the EITC. First, for families with children, the bill raises the maximum earnings used to calculate the credit to \$10,710. the annual wage of a full-time worker earning the minimum wage.¹⁸ Second, the bill extends the "phase-in" range for childless workers through the first \$6,000 in wages, and extends the "plateau" for these workers through \$10,710. Third, H.R. 3574 would double the credit's phase-in rate for childless workers to 15.3 percent, offsetting both the employer and employee share of the payroll tax. 19

The fourth major change that the Coyne proposal would make recognizes that the poverty rate is "...a stunning 29 percent for children in families with three or more children, which is more than double the poverty rate among children in smaller families" (Greenstein 2000). The bill would "create a new EITC benefit level for families with three or more children, including a credit percentage of 45 percent, which is higher than the 40 percent credit rate that currently applies under

¹⁸ In tax year 2002, the maximum earnings used to calculate the credit are \$7,370 for one-child families and \$10,350 for families with two or more children. ¹⁹ Most economists believe that, in the long run, the full burden of the payroll tax—including the employer

share—is borne by workers in the form of lower wages (Greenstein 2000).

the existing 'two or more children' category" (Statement of The Honorable William J. Coyne 2001). Figure 5 shows how the Coyne proposal would expand eligibility and credit amounts for both childless workers and families with three or more children over current law.

We estimate that H.R. 3574 would nearly double the number of EITC-eligible workers without children to 9.7 million (Table 11).²⁰ It would also more than double both the maximum credit (to \$846) and the average credit (to \$527) for these workers. Only about 15 percent of all EITC-eligible families with children have three or more children. But for these families, the maximum benefit would rise by more than \$600, and average benefits by nearly \$400, to \$2,549.



Figure 5. Structure of EITC in 1999 and under Coyne proposal (H.R. 3574)

Source: 1999 AHS, H.R. 3574 (2002), and author's calculations

Table 11, Eli	gible Families and	Average	FITC Under	1999 I aw	and Covne	Proposal
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	Eligible	Average	Eligible Families –	Average EITC –
	Families – 1999	EITC – 1999	Coyne proposal	Coyne proposal
0 children	4,980	\$193	9,666	\$527
1 child	4,465	\$1,438	4,553	\$1,936
2 children	3,741	\$2,167	3,851	\$2,257
3+ children	2,401	\$2,151	2,450	\$2,549

Sources: http://thomas.loc.gov; authors' calculations

²⁰ H.R. 3574 was introduced in 2001. To properly compare to the tax year 1999 EITC, the plateau and max earned income limits were adjusted for inflation from those presented in the bill.

B. The Dolbeare Proposal: Targeting Individual Families with High Housing Costs

Housing policy expert Cushing Dolbeare (2001) has suggested a broader change to the EITC than that embodied in the Coyne proposal, one that is explicitly designed to reduce severe housing-cost burdens among lower-income families. We note from the outset that this proposal would break the direct link between earnings and EITC benefits, and would carry substantial administrative complexity. Nonetheless, an evaluation of the proposal may provide a "best-case" look at the degree to which an EITC-like credit could lower housing-cost burdens for working families.

Dolbeare proposes an add-on to the EITC designed to ensure that no eligible family faces SHC for a reasonably-priced unit. Under her proposal, EITC recipients who pay more than 50 percent of income for rent would be eligible for an earnings-based supplement to the credit. The supplement would equal the difference between 50 percent of the family's earned income plus their current EITC benefit and their actual rent payment. The proposal would cap the benefit at the difference between 50 percent of the family income and the applicable local fair market rent (FMR).²¹

For example, a family with two children and \$12,000 in earnings would have qualified for a \$3,800 EITC in 1999. If the family paid \$700 a month in rent (assuming that such rent did not exceed the local FMR), under Dolbeare's proposal it would have been eligible for an EITC supplement of \$8,400 (12 months rent) minus \$7,900 (50 percent of earnings including current EITC), or \$500. The \$500 supplement effectively makes up the gap between 50 percent of the family's income and its total rental payments.

How would this proposal change the structure and distribution of EITC benefits? The Dolbeare proposal would tie EITC benefits not just to a family's earned income, but also to its housing costs. Therefore, a family with a given level of earned income but without SHC would receive its regular EITC benefit, while another family with the same earned income but SHC would receive a larger benefit, possibly thousands of dollars larger (see the Technical Appendix for details). Because a given level of earned income would qualify a family for a range of EITC benefits, it is impossible to show exactly how the distribution of the EITC would change from current law. However, using our model, we are able to calculate average benefits from the Dolbeare proposal for families in various earned income ranges. This method produces the "jagged-line" effect shown in Figure 6.²²

Because cost-burdened families with the lowest earned incomes would receive the largest supplements, Dolbeare's proposal would effectively convert the EITC into a traditional housing

²¹ In the cited article, Dolbeare proposes a more generous subsidy equal to the difference between 30 percent of earned income including the EITC and actual rent. Here we reduce the subsidy for cost considerations.
²² Note that using this "average benefit" method to display the structure of the Dolbeare proposal results in a line that dips below the current EITC at certain levels of earned income. In reality, because the proposal contemplates a supplement to the EITC, the proposed credit amount at a given income level always exceeds the amount under current law.

subsidy program. In addition to eroding work incentives in the phase-in range of the credit, the proposal could give rise to perverse housing incentives. For example, between two families with identical earnings living in the same local housing market, the one with the higher housing costs would receive a larger supplemental credit (up to the local FMR). This could encourage families to move into more expensive housing in order to increase their subsidies.





Source: 1999 AHS and authors' calculations

	Average EITC – 1999	Average EITC – Dolbeare proposal		
0 Children	\$193	\$1,820		
1 Child	\$1,438	\$2,092		
2+ Children	\$2,198	\$2.844		

^a The eligibility standards of the Dolbeare proposal match those of the current EITC – there is no increase in coverage, only in benefits for families with SHC.

Source: Dolbeare 2001, 1999 AHS, and authors' calculations

By requiring IRS verification of a family's actual housing costs, Dolbeare's proposal would raise administrative costs in the EITC significantly. Moreover, because the maximum allowable supplement would be tied to local FMRs, the proposal also introduces local variations into federal benefit levels. One further complexity arises from the fact that the EITC is family-based, while housing-cost burdens are measured at the household level. The proposal would necessitate some

means for determining each family's share of housing costs in multi-tax-unit households, in which over 40 percent of all EITC-eligible families live.

Overall, our model shows that the Dolbeare proposal would boost EITC benefits for childless workers by the largest amounts (Table 12). This is not surprising, since these workers are the most likely to bear severe housing-cost burdens. The magnitude by which their average credit would increase—more than \$1,600, or eight times the current average credit—is striking. The average projected benefit increase for families with children, about \$650, is modest in comparison. Recall, however, that only families with SHC would receive an increase in EITC; the amounts cited here are averaged over all families, and those with SHC would in fact receive much larger amounts.

C. The Authors' Proposal: Tying the EITC to Median Housing Costs

We share Dolbeare's goal of using tax policy to make housing more affordable for lowerincome working families. Here we develop a proposal, administratively simple relative to Dolbeare's, to expand the EITC for this purpose. The goal of our proposal is to ensure that significantly fewer working families pay more than fifty percent of their gross household incomes for decent but modest housing.

Our proposal features an implicit EITC housing supplement. Instead of tying the supplement to the actual housing costs of each EITC-eligible family (as well as local housing market conditions) as the Dolbeare proposal does, we base ours on a median housing-cost (MHC) standard. In addition to reducing complexity, this design retains the work incentive nature of the current EITC.

The MHC standard is based on a *national* distribution of local median housing costs. We set the standard such that most EITC-eligible families could afford a median-priced unit of the appropriate size in 25 to 75 percent of all local housing markets in the country. Under the proposal, EITC benefits for working families with earnings at the low end of the EITC plateau are pegged to the MHC at the 25th percentile of the national distribution, while benefits for families with earnings at the high end of the EITC plateau are pegged to MHC at the 75th percentile.

We also note that the incidence of severe housing costs by income (Table 6) reveals that, in each child category, families with SHC tended to have incomes between \$5,000 and \$15,000. Based on this empirical reality, we incorporate a steep "phase-in" rate and relatively slow "phase-out" rate into our EITC design, so that families across this income range would qualify for the largest benefits.

To illustrate how the proposal works, consider the proposed structure of the EITC for a onechild family:

• The median housing cost of a two-bedroom apartment in 1999 located at the 25th percentile along the national distribution (i.e., the price point that exceeds exactly one-fourth of all local median housing costs nationwide) was \$485 per month, or \$5,820 per year.

- In order for a family to spend no more than 50 percent of its income on that rent, it would need to earn twice that amount, or \$11,640.
- Therefore, we set the EITC phase-in rate (the amount of additional credit per dollar earned) and plateau starting point for one-child families such that the sum of earned income plus EITC benefits roughly equals the target income of \$11,640.
- To achieve this, we raise the phase-in rate from 34 cents per dollar of earnings to 60 cents, and push out the starting point of the credit plateau from the 1999 level of \$6,800 to \$7,000. Thus, a family at the beginning of the plateau would receive \$4,200, raising total income to \$11,200, including the EITC. This is just a bit shy of our target income of \$11,640.
- At the upper end of the plateau, we aim to make a two-bedroom unit at the 75th percentile price affordable. In 1999, that price was about \$690 a month, or \$8,280 a year.
- In order to meet the earnings target of double that amount (\$16,560) at the end of the EITC plateau, we select the end point such that family income plus the EITC roughly equals the target income. Moving the maximum income on the plateau *back* from \$12,460 to \$12,200, coupled with the \$4,200 maximum EITC, results in total family income of \$16,400, which is just shy of the target.

We set parameters for the zero-child and two-or-more-children credits in the same way, using MHC for three-bedroom apartments for the latter, and half the MHC of a two-bedroom apartment for the former.

In contrast to the Dolbeare proposal, the higher credit levels built into this MHC-based proposal give families an added measure of housing affordability regardless of whether they have SHC (and regardless of whether they choose to spend their additional EITC dollars for housing). Table 13 displays parameters for the MHC-based credit for families of different size, and Figure 7 graphically compares this proposal with the existing EITC (current credit in dashed lines, proposed credit in solid lines).

	0 Children	1 Child	2 or more Children
Phase-in Rate	.40	.60	.60
Plateau begins	\$4,000	\$7,000	\$8,500
Plateau ends	\$6,600	\$12,000	\$12,200
Phase-out Rate	.1530	.233	.135/.270 ^a
Max earned income	\$17,058	\$30,026	\$32,989
Max credit	\$1,600	\$4,200	\$5,100
# of Eligible Families	10,860	5,299	6,878
Average Credit	\$917	\$2,467	\$3,104

 Table 13. Parameters for EITC based on Median Monthly Housing Costs

^a Declines at the rate of .135 from \$12,201 to \$16,000; declines at rate of .27 after that.



Figure 7. Structure of EITC in 1999 and under MHC-based Proposal

Readers may note that for families with two or more children, we include a graduated phaseout rate. In addition to helping control the costs of this provision, this feature would also help many families with below-poverty incomes avoid a high marginal tax rate implicit in the EITC phase-out. (See Technical Appendix for more detail.)

How would a credit tied to local MHCs be administered? Each year, the IRS publishes new inflation-adjusted parameters for the EITC. As part of that process, HUD would supply IRS with information on the distribution of local MHCs so that the agency could set the corresponding EITC

Source: 1999 AHS and authors' calculations

plateau points. Relative to the Dolbeare proposal, the administrative costs for implementing this MHC-based proposal are quite low.

Though both the Dolbeare and MHC proposals target families with high housing costs, they produce different distributions of credit dollars. As indicated above, because the Dolbeare proposal directs additional dollars only to SHC workers and families, and because there are more childless workers with very high housing costs, it would increase average credits for these workers by a factor of eight. Families with two or more children, meanwhile, would see their average benefits rise by 29 percent. By contrast, the MHC-based alternative would result in a somewhat more modest increase in the childless worker credit (quadrupled, on average, to \$917), and a more significant increase for families with two or more children (44 percent on average, to \$3,104).

D. Comparing the Impact and Efficiency of the Three Proposals

1. Cost

The costs of the proposals vary widely. The Coyne proposal would add about \$7.7 billion to the cost of the EITC (Table 14). Dolbeare's proposal would cost \$15.5 billion, and our MHC proposal would cost \$25 billion, nearly doubling the total value of all EITC benefits. None of these cost estimates include any additional administrative costs, which would likely be substantial in the case of the Dolbeare proposal.

	Coyne	Dolbeare	MHC
Revenue cost	+ \$7.7 B	+ 15.9 B	+ 25.0 B
Targeting efficiency:	21.6%	61.5%	23.3%
percent of new EITC spending on SHC families		0.1107/0	_0.070
Reduction in families with SHC			
0-child families	-93,000	-160,000	-234,000
1-child families	-37,000	-83,000	-132,000
2-child families	-2,000	-71,000	-87,000
3+ child families	-21,000	-58,000	-58,000
Total	-153,000	-372,000	-510,000
Reduction in median housing-cost gap	-\$383	-\$1,053	-\$2,683
Reduction in households by housing-cost ratio			
Currently eligible households without children			
30-39%	-79,000	-99,000	-154,000
40-49%	-46,000	-91,000	-98,000
Currently eligible households with children			
30-39%	-157,000	-97,000	-406,000
40-49%	-86,000	-99,000	-244,000

	Coyne	Dolbeare	МНС
Newly eligible households without children*			
30-39%	-39,000		-106,000
40-49%	-29,000		-66,000
50% and above	-36,000		-81,000
Reduction in Worst Case Needs			
Households without children	-50,000	-41,000	-100,000
Households with children	-30,000	-108,000	-154,000
Total	-80,000	-149,000	-254,000
Reduction in SHC for working families			
LMI working households	-76,000	-114,000	-224,000
LMI homeowners	-46,000	-105,000	-169,000
Poverty reduction			
Households without children	-132,000	-273,000	-281,000
Households with children	-96,000	-275,000	-447,000
Total	-228,000	-547,000	-728,000
Poverty reduction by race/ethnicity (EITC-eligible households only)			
White non-Hispanic households	-6.8%	-18.1%	-21.0%
African American households	-5.1%	-10.7%	-15.7%
Hispanic households	-6.9%	-11.2%	-23.1%
Other households	-5.4%	-23.8%	-19.2%
Total	-6.2%	-14.9%	-19.8%

Source: 1999 AHS and authors' calculations

*Both the Coyne and the MHC proposals greatly expand eligibility for childless workers; these figures represent reductions in housing-cost ratios among childless-worker households who would become eligible for the credit under these proposals. Because the Dolbeare proposal does not change eligibility rules for the EITC, no additional reductions are projected.

2. Targeting Efficiency

We define "targeting efficiency" as the proportion of new EITC dollars that would be received by families with SHC. Because it explicitly links EITC supplements to families with extremely high housing costs, Dolbeare's proposal has much higher targeting efficiency than either of the others. Dolbeare's plan would direct about 62 percent of new EITC dollars to families with severe housing costs, compared to less than 25 percent for the other proposals.²³

²³ Some readers may wonder why the Dolbeare proposal doesn't achieve 100 percent targeting efficiency, if all supplemental credits are directed at those with severe housing costs. The lower figure of 62 percent represents the percentage of new dollars going to *families* with SHC, while the proposal explicitly targets *households* with SHC. Since such a significant share of households with SHC contain more than one family (but most often only one EITC-eligible family), many of the families who would receive supplemental credits under the Dolbeare proposal do not in fact face SHC at the *family* level. This calculation makes clear that the IRS would face significant problems administering a household-based credit supplement. For more details, see the Technical Appendix.

3. Impacts on Severe Housing Costs

The table shows five measures of the proposals' impacts on housing-cost burdens: (1) total reduction in SHC among families by number of children; (2) reductions in the median housing-cost gap among those with SHC; (3) reductions in housing-cost ratios below 50 percent; (4) impacts on Worst Case Needs; (5) impacts on SHC among low- and moderate-income working families; and (6) impacts on SHC among homeowners.

Our median housing-cost-based EITC proposal would reduce the number of families who face severe housing-cost burdens by 510,000, nearly as many as the other two proposals combined. The proposal would reduce the median housing-cost gap by nearly \$2,700. While fewer of the MHC proposal's dollars would be directed to families with SHC than under the Dolbeare proposal, it would reduce significantly the number of households that, while not severely burdened, pay between 30 and 50 percent of their income on housing. To be sure, the MHC proposal achieves these impacts at a cost considerably higher than that for the other two proposals.

It is noteworthy that HUD last year declared a goal to reduce the number of Worst Case Needs families with children by about 6 percent, or 103,000 families, between 2001 and 2003 (HUD 2002). If implemented, our MHC-based proposal, as well as Dolbeare's proposal, would achieve this goal.

As discussed in Section I, one area of particular policy concern is the high and growing concentration of severe cost burdens among low- and moderate-income working families, a group we define as earning between full-time minimum-wage income (\$10,700) and 120 percent of area median income. This group has been overlooked historically by federal housing-assistance programs. The proposals reduce the number of working families with SHC by amounts roughly in line with their costs, with the MHC proposal having the largest impact (224,000 families). Additionally, unlike housing vouchers which target renters only, all three measures would assist homeowners who face SHC; the MHC proposal would reduce the incidence of SHC among homeowners by 169,000.

4. Impacts on Poverty

The numbers of households lifted out of poverty by these three proposals also track their relative costs. Our MHC proposal would raise an additional 20 percent of working poor EITC-eligible households out of poverty, compared to 6 percent for the Coyne proposal and 15 percent for the Dolbeare proposal.

The impacts of the three measures on poverty vary by race and ethnicity because of differences in the demographic and economic composition of working families. In general, the Coyne proposal's focus on childless workers and large families would serve to reduce poverty more among non-Hispanic whites and Hispanics. Dolbeare's measure would reduce poverty most among "other" households, a group composed primarily of ethnic Asians. Compared to the other two

proposals, our MHC proposal would have its greatest impact on EITC-eligible Hispanic families, nearly a quarter of whom would be lifted above poverty by the credit expansion.

V. CONCLUSION

For the better part of the past 20 years, students of national housing policy of all political persuasions have come to recognize that America's "core housing problem stemmed, predominantly, not from deficits in supply but from deficits in income" (Winnick 1995).

Our experience during the 1990s—an almost decade-long period of unprecedented economic prosperity during which income inequality grew and housing affordability deteriorated—underscores this reality (Elliott, Grote, and Levin-Waldman 2001). Between 1997 and 2001, while the number of non-working or marginally employed, non-elderly families with critical housing needs fell by 15 percent, the number of full-time working families with critical housing needs grew by 60 percent, to 4 million (Lipman 2002). With unaffordable housing costs no longer concentrated among the nonworking poor, advocates and policymakers alike are searching for new strategies to help raise the incomes of working families.

At the local level, tax credits that supplement the federal EITC, and "living wage" ordinances, are emerging policies designed to address the income deficit facing low-wage workers and their families. Two localities—Montgomery County, MD, and Denver, CO—have adopted their own earned income credits that "piggyback" on the federal EITC (Johnson, Llobrera, and Zahradnik 2003). "Living wage" laws are generally enacted at the municipal level, and require certain classes of employers—in most cases, those with municipal contracts—to pay minimum wages ranging from 150 percent to 300 percent of the federal minimum wage (Turner and Barnow 2002). In researching this report, we reviewed more than 75 living-wage ordinances—with mandatory wage rates for covered workers ranging from \$6.25 an hour in Milwaukee to \$12 an hour in Santa Cruz, Calif.—and found few with the potential to close the housing affordability gap for large numbers of families (Ewell 2002).

We are inclined to prefer tax credits over living-wage laws because they do not raise employer costs directly, and are less likely to discourage employers from hiring low-skill job applicants (Employment Policies Institute 2002). Because tax credits can also be better targeted to families with children, we believe that expanding the federal EITC is an effective way of improving housing affordability for millions of working poor families. Our results indicate that, as currently structured, the EITC substantially reduces severe housing-cost burdens for millions of lower-income working households, especially those with children. At existing participation rates, the EITC reduces the incidence of SHC by an estimated 587,000 families, and at full participation, by 700,000 families. The credit also substantially reduces the incidence of HUD-defined Worst Case Needs, as well as critical housing needs among low- and moderate-income working households.

Because the purpose of this paper is to start a policy conversation among housing interests and those working on a broader "working families" agenda, rather than to analyze a single tax-credit strategy, we explored three ways that the EITC could be expanded to address growing housing costs among America's working families. Above and beyond the impacts of the existing credit, each proposal would alleviate SHC for hundreds of thousands of working families, and lift an even larger number of families above the poverty line, independent of their existing housing-cost burden. Our MHC proposal, for instance, would reduce the number of households with severe housing costs by an additional 510,000 over the current EITC, while raising an additional 728,000 working poor families out of poverty.

To be sure, we have analyzed the impacts of the EITC on only the most severe housing-cost burdens. A family paying 45 percent of its income on rent after receiving the EITC is better-off than if it had not received the EITC and paid 55 percent of its income on rent, but surely it still struggles to secure shelter and the other necessities of life. Yet with critical housing needs growing so rapidly in recent years, we believe it is appropriate to focus first on how tax policy can alleviate the most acute housing problems for low-income families. As our analysis has shown, the EITC provides significant benefits to families with more moderate housing-cost burdens (30 to 50 percent of income) as well.

In examining the potential of the EITC as an instrument of housing policy, we do not seek to diminish the role of dedicated housing and community development programs. Indeed, we cannot hope to eliminate altogether the incidence of severe housing-cost burdens through tax policy alone. Like Dolbeare (2001), we seek ways to "remove from HUD's back some of the impossible burden of adequately addressing the Nation's most critical housing affordability needs...[while leaving room]...for imaginative and creative use of vouchers and other measures." An expanded EITC would not, and should not, sound the death knell for housing assistance programs.

The Section 8 voucher program, in particular, should serve as a critical complement to income-based strategies like an expanded EITC. The congressionally-appointed Bipartisan Millennial Housing Commission, for instance, recommended the Section 8 voucher program for additional funding "in substantial annual increments" (Bipartisan Millennial Housing Commission 2002). Because a demand-side strategy based only on the EITC would leave too many families with Worst Case Needs untouched—either because they are elderly or are disabled and cannot work, or because they are only marginally employed—it makes sense to use expanded Section 8 rental assistance largely for those individuals and families who would not benefit from an expanded EITC. In fact, according to HUD, almost two-thirds of current voucher holders have primary sources of income other than wages (HUD 2003). The commission did, however, find merit in local programs that "match voucher holders with services that complement efforts to embrace employment and other opportunities." In addition, we agree with the commission that housing supply constraints at the bottom of the income scale oblige Congress to resume capital subsidies for the production of units for extremely low-income households.

To conclude, we envision an important role for the tax code in helping families pay for housing because the problem of housing affordability is so great, our nation cannot deal with it at scale through traditional housing programs alone (Turnham and Khadduri 2001). For reasons we discuss in the introduction, a significantly expanded voucher program may lack the capacity to meet the housing needs of severely burdened working families. The EITC provides a potential mechanism for increasing our commitment to affordable housing at a level commensurate with the growing needs of this population. Whether implemented at the federal, state, or local levels, an expanded EITC could go far towards helping lower-income workers meet the rising costs of safe, decent, affordable housing for themselves and their children.

TECHNICAL APPENDIX

The Earned Income Tax Credit (EITC) is designed to reward work by lowering the tax burden of lower-income working families. The credit initially increases with income, then levels off, before decreasing as income increases (Figure 1 and Table 1 in the body of the paper). The EITC is a "refundable" credit, which means that if the credit exceeds the amount of federal income tax owed, the family receives a refund of that extra amount.

To qualify for the EITC, a family's earned income and adjusted gross income must be less than the maximum income allowed for their child category. Adjusted gross income (AGI) equals earned income plus income from interests, dividends, and other sources of income. The credit is based solely on earned income, but a family must also meet the adjusted gross income limit to qualify (IRS 1999).

The amount of EITC for which a tax filer is eligible depends on the number of qualifying children in the tax unit. The largest credits are available for families with two or more children, and only a small credit is available for families without children who have very low incomes. Qualifying children must be unmarried, have resided with the parent(s) for at least half the year, and be 18 or younger (or 19 to 24 and enrolled in school full-time). Some foster children, grandchildren being raised by grandparents, and older disabled children also qualify (IRS 1999).

Modeling the impact of the EITC on housing costs presents several challenges. First, one needs a set of data with detailed information on income, household composition, and housing costs for a large national sample. The 1999 national file of the American Housing Survey (AHS) has a large sample size (67,000 units, approximately 47,000 occupied units), extensive information on housing costs and quality, and sufficient information on income to estimate the EITC with reasonable precision.

Having selected a data set, our procedure to estimate EITC receipt and the credit's impact on housing costs requires four steps:

- 1. Identifying tax units and potentially EITC-qualified children;
- 2. Determining EITC eligibility;
- 3. Calculating the EITC for eligible tax units;
- 4. Re-calculating household income including the EITC for eligible units and determining their new housing-cost burden.

Identifying Tax Units and Qualifying Children

Generally, the IRS treats the family—related individuals living together—as the taxable unit. Related individuals living together may, however, constitute more than one tax unit, depending on age, income, and other considerations. We used several variables available for each person in an AHS-sampled household to determine the number and nature of families present: relationship to respondent, identification of parent in household, and identification of spouse in household, age, and highest level of education completed.

A household may, of course, contain numerous tax units and the EITC eligibility of each tax unit must be assessed. The first step we take is to determine the "head" and "spouse" of a tax unit with an eye toward the EITC regulations regarding qualified children. The following are treated as independent tax units:

- A married couple, even in cases where the spouses' parent(s) were present in the household.
- All unmarried individuals 18 and older without a parent present in the household.
- All unmarried individuals 25 and older with a parent in the household.

Identifying children 18 and under who resided with a parent at the time of the survey is straightforward. The AHS does not, however, ask about school enrollment, so there is no way to identify children aged 19-to-24 enrolled in school (who constitute qualifying children for purposes of the EITC and, in most cases, the dependent exemption).²⁴ However, the AHS does collect the highest level of education completed for each person in the household. Therefore, we treat children 19-to-21 with a parent in the household and "some college" as children for purposes of the parent or parents' tax return. Persons aged 22 or older and persons aged 19-to-21 whose completed highest education was either high school or less or college were treated as separate tax units.

Special cases of qualified children—foster children, grandchildren raised by grandparents, and older disabled children—cannot be identified in the AHS. This causes us to underestimate the number of families with children, while overestimating families without children.

Determining EITC Eligibility

After identifying tax units and their qualified children, we determine whether each tax unit is eligible for the EITC. The AHS collects information on the earned income of every member of the household, so calculating the earned income for each tax unit within a household is fairly straightforward.

Though the EITC amount is based on a family's earned income, its adjusted gross income must also fall within the eligible income range. Determining AGI for multiple tax units in the same household is not as straightforward, because the AHS collects information about other sources of income only for the household as a whole, rather than for each person in the household separately. However, ignoring other income entirely would cause us to overestimate the number of EITC-eligible families, including many living in high-income households. We instead approximate each tax unit's

²⁴ Nor does the AHS provide information on how long a child has resided in the household, so we are unable to discount children who do not pass the EITC residency test (living at least 6 months with parent).

AGI by dividing up other non-wage household income equally among the adult taxpayers in the household, and adding those amounts to each tax unit's earned income.

For example, consider a household whose members are an unmarried mother of one living with her parents. This household consists of two tax units—the first consisting of the mother and child, and the second consisting of her parents. The first tax unit's earned income is that of the mother, and the second tax unit's earned income is the sum of the parents' earned incomes. If the household has other income of \$3,000, that income would be divided by the number of adults (three) and assigned to each tax unit according to the number of adults it has. The first tax unit (mother and child) has one adult and so would be assigned \$1,000 of other income. The second tax unit (her parents) would be assigned \$2,000 of other income. After adding other income to each unit's earned income to arrive at AGI, we determine the EITC eligibility of each tax unit. EITC eligibility of the mother-and-child tax unit is based on the one-child criteria. EITC eligibility of the parents' tax unit is based on the no-child criteria.

Calculating the EITC

After identifying a tax unit eligible for the EITC, the values its credit follows from its earned income, number of qualifying children, and the parameters in Table 1.

Recalculating Household Income

After calculating the EITC for each tax unit within a household, we sum these EITC estimates to get the total amount of EITC for the household. This amount is then added to household income and a new value of the housing-cost ratio (total housing costs divided by household income) calculated. We can then assess the impact of the EITC on housing costs by comparing the housing-cost ratio without the EITC to the housing-cost ratio with the EITC.

This four-step process was repeated for each of the EITC proposals.

A. Eligibility Estimates

In 2001, the GAO estimated the number of EITC-eligible families in 1999 using CPS data (U.S. General Accounting Office 2001). Table A.1 compares our estimates of the number of EITCeligible families to the GAO estimates and our estimates of the average credit per child category to the IRS data on actual returns. We slightly overestimate the number of EITC-eligible childless families, but underestimate the number of EITC-eligible families with children. Our estimate of the number of 3+ child families is particularly low, for which we have no explanation. However, our estimates of average credits are quite close to the IRS data, which gives us great confidence in our methods. Overall, our estimates of the impact of the EITC on housing costs are likely to be conservative.

	GAO/IRS 1999	AHS 1999	% Difference
# Tax Units			
0 Children	4,700	4,979	+5.9
1 Child	5,000	4,461	-10.8
2 Children	4,300	3,742	-13.0
3+ Children	3,200	2,398	-25.0
Total	17,200	15,580	-9.4
Average Credit			
0 Children	\$196	\$193	-1.5
1 Child	\$1,515	\$1,427	-5.8
2+ Children	\$2,284	\$2,159	-5.5

Table A.1. Comparison of EITC-Eligible Families in the AHS with GAO Estimates,1999 (Numbers in Thousands)

Sources: IRS 2001, GAO 2001, 1999 AHS and authors' calculations

GAO (2001) also estimated EITC participation rates within each of the child categories—45 percent for no children, 96 percent for one child, 93 percent for two children, and 63 percent for three or more children. To compare the impact of the EITC at current participation and full participation, we randomly assign the EITC to tax units based on the number of qualifying children and the take-up rates estimated by GAO.

B. Multi-Family Households

Overall, our AHS estimates reflect that households with more than one family constitute 22.5 percent of all U.S. households (Table A.2) and nearly 41 percent of all EITC-eligible households (Table A.3). There is a notable distinction in household structure between low-income workers with and without children: Nearly 70 percent of EITC-eligible families with children live in single-family households, but 76 percent of childless EITC-eligible filers live in multi-family households. As such, multi-family households typically receive smaller EITC amounts than single-family households.

Tax units per household	Households (thousands)	% of households	Avg. children per household
1	79,718	77.5	0.70
2	18,665	18.2	0.57
3+	4,420	4.3	0.51
Total	102,803	100	0.67

Table A.2.	Number of	Tax Unit	s per Household.	All Households.	1999
			o per mousemona,		1000

Source: 1999 AHS and authors' calculations

Table A.3. Number of Tax Units per EITC-Eligible Household* by Number of Children per TaxUnit, 1999 (numbers in thousands)

Tax units per	Eligible	Eligible	0 Child	1 Child	2 Child	3+ Child	Average
household	Households	Families	Families	Families	Families	Families	EITC
1	8,620	8,620	1,205	2,727	2,799	1,889	\$1,649
2	4,598	5,099	2,602	1,334	743	420	\$1,060
3+	1,379	1,866	1,173	404	201	89	\$1,090
Total	14,597	15,585	4,980	4,465	3,742	2,398	\$1,411

*An EITC-eligible household is defined as a household with at least one EITC-eligible tax unit. Differences between child columns and total column due to rounding.

Source: 1999 AHS and authors' calculations

C. A Recent Change to the EITC

Congress, in the 2001 Economic Growth and Tax Relief Reconciliation Act (P.L. 107-16), added a benefit in the EITC for married couples with children, extending the phase-out range by \$1,000 for tax years 2002-2004; by \$2,000 for 2005-2008; and by \$3,000 for 2008 and beyond.

We estimated the impact on housing-cost burdens had a \$1,000 extended phase-out range for married couples existed in tax year 1999. This change would have increased eligibility for the EITC by approximately 87,000 families with one child, and 160,000 families with two or more children. However, the average credit increased by just \$39 for families with one child and \$87 for families with two or more children. As a result, this change would have had almost no impact on severe housing-cost burdens, reducing the number of families with SHC by a little over five thousand.

In the first part of the paper, we primarily focus on the EITC's impact on severe housing costs as they existed in 1999, before the 2001 change became law. However, we use the modified version of the EITC with an added marriage benefit as the baseline against which to measure the impact of other proposals. Table A.4 summarizes the incidence of severe housing costs under the extended phase-out EITC.

Table A.4. Incidence of Severe Housing Costs for EITC-Eligible Families by Number of Children and Tenure EITC with Extended Phase-Out for Married Couples, 1999 (Numbers in Thousands)

	Eligible Families or Households	Number w/ SHC	Rate
Families			
0 Children	4,979	1,380	27.7
1 Child	4,555	758	16.7
2 Children	3,851	597	15.5
3+ Children	2,450	457	18.6
Total	15,835	3,192	20.2
Households			
Renters	8,531	1,909	22.4
Owners	6,307	1,122	17.8
Total	14,838	3,031	20.4

Source: 1999 AHS and authors' calculations

D. EITC Proposals

In this paper, we investigate three different EITC proposals: H.R. 3574, introduced by Congressman William J. Coyne (D-PA) in 2001, a rent-based proposal (Dolbeare), and a proposal based on median housing costs that we developed. In modeling the effects of each proposal, we followed the same steps as outlined above, applying different eligibility requirements where necessary.

1. The Coyne Proposal

Representative Coyne's EITC proposal makes three major changes to the existing EITC. First, it greatly expands coverage and the benefit for workers without children. It increases the phase-in rate to match the sum of the employee and employer portions of the payroll tax, and raises the initial amount of earnings for which the credit by \$1,000 (Table A.5). Second, H.R. 3574 would greatly increase benefits for workers with one child by increasing the maximum income in the phase-in range to \$9,870, thereby increasing the maximum benefit by over \$1,000 to \$3,356. Third, H.R. 3574 would add a third tier for families with 3 or more children, slightly increasing the phase-in rate from .40 to .45, and boosting the maximum credit by \$626.

		1				
	0 Children		1 Child		3+ Children	
	Current EITC	Coyne	Current EITC	Coyne	Current EITC	Coyne
Phase-in Rate	.0765	.1530	.34	.34	.40	.45
Plateau Begins	\$4,530	\$5,530	\$6,800	\$9,870	\$9,540	\$9,870
Plateau Ends	\$5,670	\$9,870	\$12,460	\$12,460	\$12,460	\$12,460
Phase-out Rate	.0765	.1530	.1598	.2322	.2106	.2452
Max Earned	\$10,200	\$15,400	\$26,928	\$26,910	\$30,580	\$30,580
Income	\$10, <u>200</u>	\$ 10,100	<i> </i>	\$20 , 0 1 0	<i>Q</i> CCCCCCCCCCCCC	<i>\\\\\\\\\\\\\</i>
Max Benefit	\$347	\$846	\$2,312	\$3,356	\$3,816	\$4,442
# of Eligible Families	4,979	9,666	4,555	4,553	2,450	2,450
Average Credit	\$193	\$527	\$1,438	\$1,936	\$2,204	\$2,549
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Table A.5. Comparison of Current EITC with Coyne proposal, 1999 (Numbers in Thousands)

Source: HR 3574, from thomas.loc.gov and authors' calculations

2. The Dolbeare Proposal

Cushing Dolbeare raised the idea of using the EITC and other existing federal programs as devices to help alleviate housing-cost burdens. She briefly outlined a proposal to target an added EITC benefit to EITC-eligible families with severe housing-cost burdens Dolbeare suggested giving such families an EITC supplement equal to the difference between their actual housing costs and 50 percent of their earned income plus their current EITC benefit. If a family paid more than the appropriate FMR, her proposal would cap the supplemental benefit at the difference between FMR and 50 percent of their earned income plus their current EITC benefit (Dolbeare 2001).

One difficulty in modeling the Dolbeare proposal arises from the differences between households and families. The housing-cost ratio is generally calculated as the total housing costs divided by the total household income. For multi-family households, there is no clear way to determine the housing cost borne by each family.²⁵ We approach this complication by dividing the total housing cost by the number of people in the household, and then assigning each family its per capita share of housing costs. This leads to some families receiving the additional benefit even though they don't live in a household with severe housing costs. But we feel this is a valid choice as: (1) it reflects a real-life difficulty the IRS would have in administering the program; and (2) the goal of the program is to allow families to afford decent housing. As modeled, the benefit might allow families that currently "double up" to rent their own unit.

Dolbeare's proposed added benefit simply piggybacks on the current EITC, so the eligibility criteria and coverage are the same. However, the average benefit does change and, as noted in our paper, it greatly changes the shape of the EITC and the direct relationship between earnings and credit amount.

²⁵ Note that this is a problem the IRS would face in administering the Dolbeare proposal.

3. MHC-Based Proposal

Our goal was to design a proposal that would have a substantial impact on housing-cost burdens while remaining true to the nature of the EITC and requiring little or no additional administrative cost. While there are obvious advantages to limiting the benefit to those with severe housing-cost burdens, the goal of our proposal is to enable working families to pay no more than half their income for housing in a broad range of markets. Consequently, we examined the weighted distribution of median housing costs (MHCs) for differently-sized units across the metropolitan areas included in the AHS. We then set phase-in rates and plateau points in our proposed EITC such that:

- a. earned income plus EITC for a family at the beginning of the plateau would be roughly twice the median housing cost of an appropriately sized unit in approximately 25 percent of housing markets; and
- b. earned income plus EITC for a family at the end of the plateau would be twice the median housing cost of an appropriately sized unit in approximately 75 percent of housing markets.

See Table 13 in the text for the full set of parameters.

Thus, under our proposal a working family with one child and about \$7,000 in earned income would pay half of its income (including the EITC) for a median-priced two-bedroom unit in approximately 25 percent of housing markets. A similar family making about \$12,000 could rent a median-priced two-bedroom unit in approximately 75 percent of housing markets, at half its income. Somewhat coincidentally, a similar family earning full-time minimum wage (\$10,700) would pay half of its income for a median-priced two-bedroom unit in approximately half of all housing markets.

We apply similar logic in setting credit levels for childless families and families with two or more children. In the case of the former, the plateau points were set such that families at the beginning and end of the plateau could afford half of a two-bedroom unit in approximately 25 percent and 75 percent of all local housing markets, respectively. For families with 2 or more children, we used the distribution of median housing costs for three-bedroom units.

One wrinkle seemed necessary for families with two or more children. To extend the plateau all the way to the point where the target income would cover the 75th percentile MHC would have been extremely costly and required a very high phase-out rate. Instead, we designed a graduated decline rate to ease families down from the plateau. The first decline rate is 13.5 percent and covers families with earned income between \$12,200 and \$16,000. The decline rate then doubles to 27 percent.

E. Estimating Tax Burdens and After-Tax Incomes

To our knowledge, no previous research has looked at the housing-cost burdens of working families using after-tax income. In this paper, we attempt to quantify the impact of federal income

and payroll taxes on the incidence of severe housing-cost burdens among lower-income families. To do so, we adjust family income for numerous factors—deductions, exemptions, income tax, payroll tax, the EITC, and the child tax credit. Numerous simplifying assumptions were necessary, so we caution readers to treat these numbers as indicative, not definitive.

Deductions and Exemptions

The AHS collects no information as to whether the members of the household itemize deductions on their taxes. However, given the low incomes earned by our population of interest, we assumed that all families took the applicable standard deduction. We further assumed that all unmarried parents living with their children filed as heads of household, and that unmarried non-parents filed as singles. (In reality, single non-parents can qualify as heads of household in limited circumstances.) Finally we assumed that all married couples filed jointly. Table A.6 displays our resulting assumptions as to families' deductions and exemptions.

Children	Single	Married
Zero	\$7,050	\$12,700
1	\$11,850	\$15,450
2	\$14,600	\$18,200
3*	\$17,350	\$20,950

*Add \$2,750 per additional child Source: IRS 1999 Form 1040A Instructions

Income Tax

In 1999, individual income tax rates were: 15 percent of taxable income up to \$25,750 for singles, \$34,550 for heads of household, and \$43,050 for married couples filing jointly; then 28 percent up to taxable income of \$62,450, \$89,150, and \$104,050 respectively.²⁶

Child Tax Credit

In 1999, families could receive a tax credit of up to \$500 per child. However, it was not a refundable credit, which means that the credit could only be used to pay taxes owed. By implication, most EITC-eligible families, who owe no income tax, did not benefit from the child credit at the time.

The 2001 tax act increased the child tax credit to \$600 per child and made it partially refundable. First, the available credit is used to pay any income tax owed. If there is any credit remaining, the refund is the lesser of the remaining credit or 10 percent of earned income above \$10,000. For example, a single mother with one child whose gross income (all earned) is \$11,850 owes no income tax, but would receive a child tax credit refund of \$185.

²⁶ In 2001, a 10 percent bracket was added for taxable incomes below \$5,550 for single filers, \$9,200 for heads of household, and \$11,100 for married couples filing jointly (all figures adjusted to 1999 dollars).

After-Tax Income

The total tax burden is estimated as the sum of the income tax owed plus the payroll tax (7.65% of earned income) minus the EITC and child tax credit. For this paper, we use 2002 IRS regulations (adjusted to 1999 dollars) in order to assess the impact of the refundability of the child tax credit. Note, due to refundable credits like EITC and the child tax credit, this tax "burden" may be negative.

Once taxes owed are calculated, they are subtracted from family gross income to arrive at family after-tax income. For the household-level measures presented in this paper, we sum after-tax incomes across all families in a household.

References

- Berube, A., and B. Forman. 2001. "Rewarding Work: The Impact of Earned Income Tax Credit" (EITC Series). Washington: Brookings Institution.
- Bipartisan Millennial Housing Commission. 2002. "Meeting Our Nation's Housing Challenges". Washington.
- Burman, L., and D. Kobes. 2002. "Analysis of GAO Study of EITC Eligibility and Participation." Washington: Urban Institute.
- Congressional Record, daily ed., December 20, 2001, p. H10963.
- Daskal, Jennifer. 1998. "In Search of Shelter: The Growing Shortage of Affordable Rental Housing." Washington: Center on Budget and Policy Priorities.
- Dolbeare, C.N. 2001. "Housing affordability: Challenge and Context." *Cityscape: A Journal of Policy Development and Research* 5 (2): 110–130.
- Eissa, N., and J. Liebman. 1996. "Labor Supply Response to the Earned Income Tax Credit." *Quarterly Journal of Economics* 112 (2): 605–637.
- Elliott, M., M.W. Grote, and O. Levin-Waldman. 2001. "Deepening Disparity: Income Inequality in New York City." New York: Public/Private Ventures.
- Ellwood, D. T. 2000. "The Impact of the Earned Income Tax Credit and Social Policy Reforms on Work, Marriage, and Living Arrangements." Joint Center on Poverty Research Working Paper 124.
- Employment Policies Institute. 2002. "Living Wage Questions." (www.epionline.org/livingwage/lw_solutions.cfm [June 8, 2002]).
- Ewell, W. 2002. "Living Wage Statutes, January 11, 2002." Unpublished manuscript, University of North Carolina at Chapel Hill.
- Greenstein, R. 2000. "Should the EITC for Workers Without Children be Abolished, Maintained, or Expanded?" Washington: Center on Budget and Policy Priorities.
- _____. 2000. "Should EITC Benefits be Enlarged for Families with Three or More Children?" Washington: Center on Budget and Policy Priorities.
- Harkness, J.M., S.J. Newman, and B.J. Lipman. 2002. "Housing America's Working Families: A Further Exploration." *New Century Housing* 3 (1).

Housing Law Bulletin. 2001. "The Case for Applying California's Source of Income Anti-Discrimination Statute to Section 8 Tenants." (June).

H.R. 3574, 107th Congress, 1st Session., (December 20, 2001).

HUD USER. 1999. "Waiting Lists Grow While Affordable Housing Shrinks." *Recent Research Results*. (http://www.huduser.org/ periodicals/rrr/rrr5_99art1.html [February 18, 2002]).

Internal Revenue Service. 2000. 1999 Form 1040A Instructions.

_____. 2001. Individual Income Tax Returns, 1998.

_____. 2002. "Participation in the Earned Income Tax Credit Program for Tax Year 1996." Fort Lauderdale/Greensboro: SB/SE Research.

______. 2002. Individual Income Tax Returns, 2000. Preliminary Data Release.

Johnson, N. 2000. "How Much Would a State Earned Income Tax Credit Cost?" Washington: Center on Budget and Policy Priorities.

_____. 2001. "A Hand Up: How State Earned Income Tax Credits Help Working Families Escape Poverty in 2001: An Overview." Washington: Center on Budget and Policy Priorities.

Kunkle, F. 2001. "Housing Vouchers No Magic Key." Washington Post, August 5.

- Lipman, B. 2002. "America's Working Families and the Housing Landscape 1997–2001." *New Century Housing*, 3(2).
- Making Wages Work. 2001. "Earned Income Tax Credit and Other Tax Benefits." (http://www.makingwageswork.org/earned.htm [July 2, 2002]).
- National Association of Realtors, Institute of Real Estate Management. 2001. "Proposed Reforms to the Section 8 Voucher Program." Washington. (http://www.mhc.gov/responses/058001a.doc [January 3, 2003]).
- National Council of La Raza. 2000. "Hispanic Families and the Earned Income Tax Credit" (Issue Brief No. 1). Washington.
- National Low Income Housing Coalition. 2002. "Out of Reach 2002: America's Growing Wage-Rent Disparity: Introduction." Washington.

- Notice of Annual Factors for Determining Public Housing Agency Ongoing Administrative Fees for the Housing Choice Voucher Program and Moderate Rehabilitation Programs. *Federal Register* 67 No. 72 (April 15, 2002).
- Offner, P. and H. Holzer. 2002. "Left Behind in the Labor Market: Recent Employment Trends Among Young Black Men." Washington: Brookings Institution.
- Phillips, K.R. 2001. "Who Knows About the Earned Income Tax Credit?" Washington: Urban Institute.
- O' Hara, A. 2002. "Proposals to Improve the Housing Voucher Program." Hearing before the Senate Committee on Banking, Housing and Urban Affairs, 107 Cong. 2 sess. (April 11).
- Romich, J., and T. Weisner. 2001. "How Families View and Use the EITC: Advance Payment versus Lump Sum Delivery." *National Tax Journal* 53 (4), Part 2: 1245–1265.
- Sard, B. 2001. "Housing Vouchers Should be a Major Component of Future Housing Policy for the Lowest Income Families." *Cityscape: A Journal of Policy Development and Research* 5 (2): 89–110.
- Sawhill, I., and A. Thomas. 2001. "A Tax Proposal for Working Families with Children." *Welfare Reform & Beyond* Policy Brief No. 3. Washington: Brookings Institution.
- Smeeding, T. M., K.R. Phillips, and M. O'Connor. 2000. "The EITC: Expectation, Knowledge, Use, and Economic and Social Mobility." *National Tax Journal* 53 (4), Part 2: 1187–1210.
- Stegman, M.A. 2001. "Financing the Modernization of Public Housing: Risks and Opportunities for Capital Suppliers." Presentation prepared for Lehman Brothers.
- Stegman, M.A., R. Quercia, and G.W. McCarthy. 2000. "Housing America's Working Families." *New Century Housing* 1 (1).
- Stewart, J. 2001. "Being Forced Out by Low Incomes, Rising Rents." *Los Angeles Times*, September 29.
- Turnham, J., and Khadduri, J. (2001, September 18). *Issues and options for HUD's tenant-based assistance program: Prepared for the Millennial Housing Commission's Consumer Based Assistance Task Force.* Bethesda, MD: Abt Associates, Inc.
- Urban-Brookings Tax Policy Center. 2000. "Earned Income Tax Credit Parameters, 1975–1999." Washington. (http://www.taxpolicycenter.org/taxfacts/lowincome/eitc_historic.cfm [January 17, 2002]).

- U.S. Department of Commerce and U.S. Department of Housing and Urban Development. 2002. American Housing Survey for the United States: 2001.
- U.S. Department of Housing and Urban Development, Office of Policy Development and Research. 1999. "Waiting Lists Grow While Affordable Housing Shrinks." *Recent Research Results*.

_____. 2001. "A report on Worst Case Housing Needs in 1999: New Opportunity Amid Continuing Challenges."

_____. 2002. "Congressional Justifications for Fiscal Year 2003."

_____. 2002. "Codebook for the American Housing Survey, Public Use File: 1997 and later." (Draft, version 0.70). Washington: ICF Consulting.

_____. 2003. "The Housing Choice Voucher Program: Who is Served—A National Overview."

U.S. General Accounting Office. 2001. "Earned Income Tax Credit Eligibility and Participation." GAO-02-290R.

____. 2002. "Financial Management: Strategies to Address Improper Payments at HUD, Education, and Other Federal Agencies." GAO-03-167T.

- Vallerie Denney Communications. (n.d.). "Half of Landlords Tested Refuse Housing Vouchers, Additional 15%–25% Equivocate." (http://www.vdcom.com/articles/publish/article_143.shtml [January 3, 2003]).
- Winnick, L. 1995. "The Triumph of Housing Allowance Programs: How a Fundamental Policy Conflict was Resolved." *Cityscape* 1 (3): 97.