September 28, 2007

APPENDIX

METHODOLOGY FOR “HOUSING VOUCHERS COULD BE AT RISK IN 2008: Distribution Formula and Funding Level Are Key Issues”

This appendix describes the sources and methods used to make the estimates that appear in the body of this analysis. Our estimates rely primarily on two sets of HUD data. The first set is from HUD’s Voucher Management System (VMS). The VMS contains data on the number of leased vouchers and subsidy payments made to owners, which agencies submit to HUD on a quarterly basis. At the time we conducted this analysis, we had access to VMS data covering the period from August 2002 (the start of these data) through March 2007. The second set of data is HUD’s Resident Characteristics Report (RCR) database, downloaded periodically through mid-2007, which contains information on the number of authorized vouchers at each agency.

Voucher Renewal Funding in 2007

The 2007 HUD appropriations law provided $14.44 billion for voucher renewals, including $100 million set aside (1) to cover cost increases due to portability or “unforeseen circumstances” and (2) to make adjustments for agencies that otherwise would have received a significant decrease in voucher funding due to the 2007 formula change. HUD notified housing agencies of their renewal funding awards in late June of 2007 and of their eligibility to receive a portion of the $100 million adjustment fund in mid-September. Because the renewal funding awards and the adjustment amounts have not been made public by HUD and were not available to CBPP, we were required to estimate the renewal funding received by each agency in 2007. (In our estimates, adjustments made out of the $100 million set-aside were ignored, as there was no reasonable way to determine how these adjustments would be distributed.)

Under the 2007 appropriations law, each agency’s share of voucher renewal funding was based on its costs for vouchers leased during calendar year 2006, adjusted by the applicable 2007 HUD inflation factor (the “Annual Adjustment Factor,” or AAF), and with additional adjustments for costs of first-time renewal of new “tenant protection” vouchers and for vouchers that were not in use during the 12-month period because they had been committed to provide “project-based”

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1 VMS data for some agencies were missing in one or more quarters. In these cases, we projected costs and utilization using data submitted by the agency for an earlier quarter and assumed that the agency’s subsequent costs and utilization grew at the average rate reported for the same quarter at agencies with complete data. In a small number of cases, agencies reported extremely high or low per-unit costs or utilization rates, indicating that the data were likely to be erroneous. In these cases, we adjusted the data either in the same manner as for agencies with missing data or based on information on an agency’s voucher program that we obtained from the agency.
assistance in the near future. In addition, the basic funding formula was modified in various ways for housing agencies in four categories: MTW agencies with special block-grant style funding agreements; agencies affected by the 2005 Gulf Coast hurricanes; agencies operating under administrative receivership; and agencies that overspent voucher funding in 2006.2

We used VMS leasing and cost data from the 2006 calendar year, adjusted by each agency’s actual 2007 HUD AAF, to estimate renewal funding eligibility under the 2007 law. Because data were unavailable, however, no adjustments were made for additional funding for which agencies may have qualified due to award of new tenant-protection vouchers or project-based commitments during 2006. Following the 2007 law, we also used modified formulas to calculate the renewal funding due to MTW agencies with special block-grant style funding agreements, Gulf Coast agencies affected by the hurricanes, and agencies in receivership; however, we were unable to calculate the modified funding eligibility for agencies that overspent in 2006 (again, due to lack of data about which agencies would be affected).

HUD was required to distribute all renewal funds under the 2007 formula (except for the $100 million set aside), and was required to pro-rate each agency’s renewal funding award so that the total amount awarded matched the total renewal funds provided by Congress. Having calculated the funding amount for which each agency was eligible under the 2007 formula, we then applied a funding proration factor of 1.05017 percent, which was the actual proration determined by HUD, to estimate a final renewal funding amount for each housing agency in 2007. Our estimates did not include $66 million in 2007 renewal funding allocated by HUD. (This amount includes the adjustments due under the law that we were unable to estimate as well as funds based on data corrections submitted by agencies to HUD but not reflected in the VMS data we had available.)

Numbers of Vouchers Leased and Per-Voucher Costs in 2007 and 2008

To estimate voucher renewals funded under the House and Senate appropriations bills, as well as the President’s budget, we had to estimate the number of vouchers agencies would use in 2007 and what these vouchers would cost to renew in 2008.

Number of Vouchers Leased in 2007

Two separate estimates of the number of vouchers leased in 2007 were made for two distinct purposes. First, the average number of vouchers leased by each agency in calendar year 2007 was projected for the purpose of estimating the 2008 renewal funding that each agency would receive under the Senate bill. Second, average leasing for each agency in the 4th quarter of 2007 was estimated for the purpose of evaluating the extent to which vouchers in use at the end of 2007 would be renewed under the House and Senate bills, as well as under the President’ budget.

As noted above, the latest month for which we have VMS data is March 2007, which allowed us to determine actual leasing levels and per-unit costs for each agency for that month (and for the first quarter of 2007) and to compare these data to the averages for calendar year 2006. Among other

things, we determined that, as of March 2007, the total number of vouchers in use had already increased by 2.1 percent, in comparison to the average for calendar year 2006.

Leasing for April through December 2007 had to be estimated. For three reasons, we assumed that leasing would continue to increase in the final three quarters of the year. First, many, though not all, agencies began 2007 with substantial reserves of unspent funding from prior years. Second, the 2007 HUD appropriations law provided each agency with approximately 5 percent more funding than needed to renew the average number of vouchers in use in 2006. And third, the 2007 renewal formula based funding on actual leasing and costs during the most recent 12-month period, which provides an incentive to agencies to assist more families—and draw down a portion of their reserves if necessary to do so—based on the expectation that renewal funding in future years will be determined by their recent leasing performance. In accord with these considerations, we assumed that the number of vouchers in use at each agency would increase by up to four percent from the first quarter to the fourth quarter of 2007 (with adjustments, as explained below).

Each agency’s average leasing for the calendar year 2007 was then estimated by calculating the average of their actual average leasing in the first quarter and estimated average leasing in the fourth quarter. The resulting average for each agency for calendar year 2007 was then capped by two upper limits: the agency’s total authorized number of vouchers in January 2007 and the total number of vouchers it could pay for using all available funds (including unspent funds in reserve). The latter limit was determined in part by applying an estimate of each agency’s per-voucher cost in 2007 and its funding reserves as of the end of 2006 (these estimates are explained separately below).

Similarly, each agency’s projected average leasing for the fourth quarter of 2007 was also capped by its authorized number of vouchers in January 2007 and total vouchers funded by renewal funding and reserves in 2007. The resulting figures were used to determine the number of vouchers in use in 2007 that would be funded under the House and Senate bills, and the President’s request. After the two caps were applied, the projected net gain in average voucher usage from calendar year 2006 to the fourth quarter of 2007 was 3.5 percent, about 1.4 percent above the gain that had already occurred as of March 2007.3

**Per-Voucher Costs in 2007 and 2008**

To estimate agencies’ per-voucher costs in 2007 and 2008, we used the actual cost data for the first quarter of 2007 as the starting point. For the remainder of 2007 and the entirety of 2008, we assumed that each agency’s per-voucher costs would increase at the applicable HUD inflation factor. For 2007, we used HUD’s published 2007 AAFs, prorated for the remaining months of the year. (HUD’s 2007 AAFs, weighted to reflect the authorized vouchers funded at each agency, average 4.05 percent.) For 2008, we estimated the 2008 AAF at each agency by comparing HUD’s proposed 2008 Fair Market Rents with the 2007 level. (HUD typically uses the same data to determine FMRs and AAFs.) Nationally, we estimate that the average HUD AAF for 2008 will be 4.36 percent.

The assumption that costs would increase at the rate of inflation beginning in April 2007 is grounded on our judgment that declining costs in 2005 and 2006 were largely the result of policy

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3 We excluded from our estimates of 2007 leasing new tenant protection vouchers awarded in 2007, for two reasons. First, these vouchers come with new funding, and second, we have no data on these awards. As explained below, we adjusted our 2008 estimates to include the cost of renewing the 2007 tenant protection vouchers.
changes that agencies made beginning in mid- to late-2004 to respond to funding shortfalls that year and in 2005. Once these changes were fully in effect — many would not have been implemented for individual families until up to two years later — further policy-driven declines in costs would be unlikely. (Some agencies’ costs would have continued to decline due to rent decreases in the market. For these agencies, the inflation factor is likely to be zero or low.) With more funding in 2007 than in 2006, agencies are likely to allow reasonable rent increases requested by owners to keep them in the program, and may adjust payment standards at least to the extent of increases in HUD Fair Market Rents.

**Vouchers Funded in 2008 Under Pending Bills**

The voucher renewal funding amounts included in the President’s 2008 budget and in the 2008 Transportation-HUD appropriations bills approved by the House and Senate (H.R. 3074) are listed in Table 1. Each bill, as well as the budget, sets aside $75 – 100 million for adjustments in funding due under the formula. Because these adjustments would be made largely at HUD’s discretion, we could not allocate those funds to the agency level, and we therefore excluded the adjustment amounts from our analysis.4

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<th>TABLE 1: VOUCHER RENEWAL FUNDING UNDER PENDING BILLS</th>
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As the paper explains, Congress must decide what funding approach to use to distribute, among the 2,400 state and local agencies, the voucher renewal funding it provides for 2008. The House bill would use the same approach proposed in the President’s budget, which is much like the block-grant style formula used in 2006. Under this approach, renewal funding is based primarily on the funding agencies received in the prior year. The Senate bill would continue the formula approved by Congress for 2007, under which each agency’s share of renewal funding is determined by its voucher leasing performance and costs during the most recent 12-month period. This approach was also approved in July by the House as part of the Section 8 Voucher Reform Act (or SEVRA, H.R. 1851).

Our method for estimating the number of vouchers that would be funded at each agency under each of these three approaches is explained below.

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4 The permissible uses of the set-aside funds are identical under the President’s budget and the House bill, but are somewhat different under the language included in the Senate bill. Because of the nature of the specified use of the funds and uncertainty about other possible uses, our analysis does not include any additional vouchers that could potentially be funded with the set-aside funds.
Estimating Vouchers Funded Under the House FY 2008 Appropriations Bill

Following the formula used in the House bill, estimates of agency voucher funding in 2008 were determined in four steps.

1) The starting point was the renewal funding that each agency received in 2007.\(^5\) As noted above, the funding that an agency was eligible to receive in 2007 had two components: 1) the basic renewal awards, and 2) the adjustments that some agencies received out of the $100 million that Congress set aside for this purpose. Because actual renewal funding awards for 2007 are not yet publicly available, we estimated each agency’s award, using the method explained above. We ignored the second component of funding (the $100 million in adjustments), as there was no reasonable way for us to predict these adjustments.

2) We adjusted the 2007 agency-level funding estimates to reflect the $66 million of 2007 renewal funding we were unable to allocate and the $100 million in adjustment funds (as these funds will have been received by agencies in 2007). For 2007 tenant protection awards, we estimated the funds needed nationally for first-time renewals\(^6\) and reserved these funds in determining the estimated proration rate, as described below. Data also were not available on project-based commitments in 2007, so we omitted these from our calculations.\(^7\)

3) The resulting sum (i.e., total funding received in 2007 plus adjustments) was inflated by an estimated weighted national HUD annual adjustment factor (AAF) for 2008. As explained above, the estimated average 2008 AAF is 4.36 percent.

4) Finally, if funding provided for voucher renewals under the House formula is insufficient, HUD is directed to prorate funding using the same percentage for all agencies. Using the three steps described above, we estimated that full funding of the budget formula in 2007 would cost $15.15 billion, $483 million more than the $14.67 billion provided under the House bill. As a result, HUD would have to prorate, or reduce, the funding each agency is eligible to receive by 3.19 percent. If our estimate of the cost in 2007 of fully funding the formula is too high or too low, or if Congress provides more or less funding than is included under the House bill, the proration rate would change accordingly.

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\(^5\) The House bill directs HUD to fund agencies with special funding agreements under the Moving to Work Demonstration pursuant to their agreements, rather than on the amount the agencies received in 2007. Thus for these 17 agencies we used the estimated amount of their 2007 funding prior to the upward proration all agencies received, inflated by their 2008 AAF.

\(^6\) We estimated that HUD would need $166 million in 2008 for the first-time renewal of tenant protection vouchers. This amount may be high or low, depending on how many new vouchers were issued in 2007, their actual cost, and whether HUD provided agencies initially with 12-month awards (their prior practice) or only the sum needed for the remaining months of calendar 2007 (their claimed current practice). From a non-random sample of agencies, it appears that HUD’s practices have been inconsistent.

\(^7\) The House bill also specifies that agencies’ funding levels should be adjusted to reflect the costs due to deposits by agencies in the escrow accounts of families participating in the Family Self-Sufficiency program. We could not include these costs in our estimates due to the lack of available data. In any event, the increase in such costs in 2007 compared with 2006 – which is the likely way the House language would be implemented – is likely to be very small.
To estimate the total number of vouchers funded at each agency under the House bill, we divided the estimated 2008 post-proration funding that each agency would receive by our estimate of the agency’s per-voucher cost in 2008 (see above).

Under the formula in the House bill, the $14.67 billion available to renew vouchers would fund about 2,010,000 vouchers at local agencies, according to our estimates. Some 34,000 of these vouchers, however, would be “unauthorized” — that is, they would be in excess of the number of vouchers the agencies are currently authorized to administer. The House bill (and the Senate bill) retain the prohibition on using renewal funds to serve more families than the authorized level. Thus, we estimate that the House bill would provide renewal funding for 1,976,000 authorized vouchers. (This figure does not include vouchers funded with the $100 million set aside for adjustments, the $66 million in 2007 funding we were unable to allocate at the agency level or the tenant protection vouchers first awarded in 2007, but our estimates reserve funds to renew the vouchers funded with these amounts.).

By comparing the number of vouchers funded at each agency under the House bill with the estimated vouchers in use at each agency in the fourth quarter of 2007, we calculated the number of voucher renewals that would not be funded. This comparison showed that, under the House bill, 1,300 agencies would receive no renewal funding for 55,000 vouchers in use at the end of 2007.

The failure to renew 55,000 vouchers is a combined effect of the renewal funding amount and the funding distribution formula contained in House bill. To isolate the impact of the funding formula, we repeated the calculation of the number of vouchers funded at each agency in 2008 assuming that the higher Senate renewal funding amount ($14.84 billion), rather than the House bill amount, was distributed under the House funding formula. The results showed that 44,000 vouchers in use at the end of 2007 would receive no renewal funding in 2008, if the House funding formula were used to distribute the renewal funding amount set in the Senate bill.

**Estimating Vouchers Funded Under the President’s 2008 Budget**

The number of vouchers funded under the President’s 2008 budget was estimated using the same method used to analyze the House bill, but substituting the renewal funding amount of $14.35 billion for the House bill figure of $14.67 billion. (This amount excludes the $100 million in renewal funding set aside for adjustments in the budget request.) Using this method, we calculated that the President’s budget would result in a renewal funding proration of 5.33 percent, and would fund 1,941,000 authorized vouchers in 2008. The President’s budget request would provide no renewal funding for approximately 80,000 vouchers in use at the end of 2007, according to our calculations.

**Estimating Vouchers Funded Under the Senate FY 2008 Appropriations Bill**

The Senate appropriations bill would distribute renewal funding under a formula based on each agency’s costs for vouchers leased in “the most recently completed of 12 consecutive months for which [HUD] determines the data is verifiable and complete,” adjusted by the applicable 2008 HUD inflation factor, and with additional adjustments for the costs of “tenant protection” vouchers and vouchers that were not in use during the 12-month period because they had been committed to provide “project-based” assistance in the near future. Similar to the 2007 HUD appropriations law, the Senate bill applies modified funding formulas for four categories of housing agencies: agencies
participating in the Moving to Work demonstration program that have special funding agreements with HUD; agencies affected by the 2005 Gulf Coast hurricanes; agencies that have been placed in administrative receivership; and agencies that overspent the voucher funding available to them in 2007.

The Senate bill provides total voucher renewal funding of $14.94 billion, of which $100 million is set aside for the purpose of adjusting funding for agencies experiencing cost increases due to portability or “unforeseen circumstance” or that would experience a “significant decrease in voucher funding that could result in the risk of loss of voucher units due to the use of [the leasing and cost] data based on a 12-month period.” Following the formula prescribed in the Senate bill, we estimated vouchers funded at each housing agency via the following steps:

1) Under the Senate formula, the base of each agency’s renewal funding is its leasing and costs during the most recent 12-month period, which we assumed would be interpreted to be calendar year 2007. We estimated 2007 spending for each agency by multiplying its estimated per-voucher cost for 2007 by its estimated average leasing for calendar year 2007 (see above on how these were calculated).

2) Adjustments for new tenant protection vouchers expiring for the first time and the application of the estimated HUD AAF for 2008 were made using a method similar to that used in the estimates of vouchers funded under the House bill. In accord with our analysis of the House bill, we were unable to make adjustments for project-based vouchers that are committed in 2007 but not yet leased.

3) Having calculated each agency’s eligibility for funding under the Senate formula, we then calculated a funding proration by dividing the formula renewal funding provided under the Senate bill ($14.84 billion) by the total funding eligibility, as determined in steps (1) and (2) above. The calculation revealed that there would be no prorated funding cut under the Senate bill; in fact, the estimates show that each agency would receive somewhat more than the base funding amount for which it would be eligible under the formula. This is an important conclusion, in light of our projection that voucher use will continue to increase in the second half of 2007. If funding were sufficient only to renew the average number of vouchers in use during the year, some agencies that served more families near the end of 2007 would have to reduce the number of families with voucher assistance during 2008.

4) We then divided each agency’s estimated renewal funding allocation for 2008 by its estimated per-voucher cost to determine how many vouchers would be funded under the Senate bill.

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8 Our estimates include the same adjustment for the first-time cost of renewing tenant protection vouchers for both bills, despite the fact that some new 2007 tenant protection vouchers may be reflected in the first quarter leasing data. This somewhat inflates our estimate of the costs of the Senate formula.

9 The impact on agencies with end-of-year leasing gains could be mitigated somewhat by funding adjustments made out of the $100 million set aside in the Senate bill. To accomplish this goal, however, the bill language describing the use of these funds may need to be altered. In addition, the funding set aside in the Senate bill would be inadequate to cover more than a modest portion of the added renewal costs due to leasing gains in the second half of 2007.
The estimates showed that the Senate bill would fund a total of 2,012,000 authorized vouchers in 2008.\textsuperscript{10} More importantly, a comparison of the total vouchers funded at each agency with its projected leasing in the fourth quarter of 2007 revealed that every voucher in use at the end of the year would be funded under the Senate bill.

\textbf{Estimates of Voucher Funding Reserves}

According to a notice issued in January 2006, HUD swept all agency reserves of unspent voucher funding from years prior to 2005. In 2005, 2006, and 2007, housing agencies have been allowed to keep unspent balances of voucher funding in reserve accounts and to use this funding when necessary to assist families. For every agency, we calculated funding reserve levels at the end of 2005 and 2006 by subtracting, for each year, the total housing assistance payments made from the total voucher funding received, according to HUD documents. In addition, we estimated in a similar way the reserve funding that would be available to each agency at the end of 2007 using our estimates of funding received and total spending for 2007.

\textsuperscript{10} As under the House bill analysis, this figure does not include vouchers that would be funded through the $100 million set aside for adjustments or through the distribution of $166 million for the renewal of tenant-protection vouchers awarded in 2007. See discussion of House bill for a more complete explanation.