

Testing Performance Measures for the MTW Program



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Authors:
Larry Buron
Melissa Vandawalker
Tyler Morrill

with

Jill Khadduri
Jeffrey Lubell
Azim Shivji

Abt Associates
Cambridge, MA and
Bethesda, MD

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1. Introduction

The Moving to Work (MTW) demonstration program provides participating agencies with the ability to seek HUD approval for waivers to regulatory rules that normally govern the public housing and Housing Choice Voucher programs, as well as waivers to statutory provisions (with some exceptions). MTW agencies also have “single fund flexibility,” enabling them to shift resources among funds allocated for particular programs (again with some exceptions). The overall objective of MTW is to permit selected PHAs to design and test different approaches to providing housing assistance.

The MTW statute identifies three core policy goals for MTW agencies. In brief, they are to:

- Reduce cost and achieve greater cost effectiveness;
- Help residents make progress toward economic self-sufficiency; and
- Increase housing choices for low-income families.

At present, comparatively little is known about the extent to which MTW programs are advancing these or other housing policy goals because there has been no aggregate quantitative analysis of the program across agencies. The purpose of this paper is to identify and test a series of performance indicators that can be used to track the performance of MTW programs in advancing core goals and compare them to non-MTW peer agencies. It employs a quasi-experimental design to provide a general idea of how the MTW program impacts agency outcomes, and to better understand how agencies implementing special programs like MTW might be evaluated in relation to their peers.

Recommended Performance Indicators

In developing these performance measures, we used the following principles as guidelines:

- Focus on measuring outcomes (e.g., improvements in earnings for subsidized housing residents), rather than inputs (e.g., money spent on self-sufficiency activities);
- Use measures that are standard across PHAs rather than locally-defined measures;
- Develop measures that could also apply to non-MTW PHAs; and
- To the extent possible, use data that PHAs regularly collect or could collect without much additional effort.

Our recommended performance measures are organized according to six main categories. Five of the six categories are substantive policy goals for MTW programs based on the three statutory goals, including three measures reflecting different aspects of increasing housing choice: quantity and quality of affordable housing; residential stability; and geographical choice. The sixth category contains other key indicators of the performance of voucher and public housing programs, including performance metrics that anticipate concerns that could be raised about MTW.

1. Cost-Effectiveness
2. Economic Self-Sufficiency
3. Quantity and Quality of Affordable Housing
4. Promoting Residential Stability for Targeted Households

5. Expanding Geographical Choices of Assisted Households
6. Other Key Metrics (e.g., income of people served, affordability of rent payments)

In developing these proposed measures, we reviewed the performance measures developed by the MTW Working Group (a group of MTW PHA administrators) and HUD's MTW performance measures. However, because our task was to identify measures that could be used to compare MTW and non-MTW programs, we developed our measures largely independently. Draft versions of the performance measures were vetted with a working group set up by the Public and Affordable Housing Research Corporation (PAHRC) and consisting primarily of representatives of public housing industry groups, and then shared with MTW PHAs for further feedback. This feedback led us to add additional performance measures, fine tune other measures, and to defer attempts to collect data on a few recommended performance measures. The deferred measures were those which reviewers advised would be a large burden for PHAs to provide on—in many cases, because they would require historical rather than current data.

Organization of the Report

Chapter 2 describes the selection of comparison agencies and data sources and discusses other methodology issues. Chapters 3 through 8 introduce the specific performance indicators for each of the six performance categories. When data are available, the values for these performance indicators are presented. The full list of performance measures, including measures on which we did not attempt to collect for this report are shown in Appendix A. The list of MTW and comparison PHAs are presented in Appendix B.

2. Methods for Comparing MTW and Non-MTW PHAs

This chapter presents the study's methodology for selecting the comparison PHAs and analyzing the study's different sources of data. Section 2.1 describes our process for selecting comparison PHAs, Section 2.2 describes the sources of data used in the analysis, Section 2.3 presents our analysis methods, and Section 2.4 shows select characteristics of the MTW and Comparison PHAs.

2.1 Selection of Comparison PHAs

To understand whether the MTW program has an effect on PHA performance, there needs to be a counterfactual to assess how PHAs with MTW authority would have performed if they had not been in MTW. For this counterfactual, we selected non-MTW PHAs with characteristics similar to those of the MTW PHAs. Three to five comparison PHAs were selected individually for each MTW PHA.

We started by categorizing each PHA based on: (1) program type (Housing Choice Voucher (HCV)-only or both HCV and public housing); (2) PHA jurisdiction in a metro or non-metro area; and (3) Census Division in which the PHA is located. We restricted comparison agencies to those in the same category (i.e., same program type, metro type, and Census division) as the MTW agency being matched. Within the category, we selected the non-MTW PHAs that matched the closest to the MTW PHA based on PHA and community characteristics that we thought would affect the efficiency of the program and economic and housing opportunities for participants in the community. The match was based on these characteristics:

- Number of housing choice vouchers;
- Number of public housing units;
- Two-bedroom Fair Market Rent (FMR) of the PHA;
- Poverty rate in the county;
- Median county income of renters; and
- Unemployment rate in the county.

From these characteristics, we created an index score ranging from 0 to 1 that measures how closely matched the non-MTW PHAs are to each MTW PHA in the same category. For this index, the two size measures (number of vouchers and public housing units) of the PHA accounted for 60 percent of the score, and the other characteristics accounted for 10 percent each. For each MTW PHA, we examined the index scores and selected three to five non-MTW PHAs with the highest index scores to be the comparison PHAs. In a few cases, none of the non-MTW PHAs in the same category was a good match. In those cases, we either removed the restriction that the comparison PHA be in the same Census division or allowed a PHA with only a small number of public housing units to be matched to an HCV-only PHA. A total of 118 comparison PHAs were selected for the 38 MTW PHAs. A complete list of these PHAs is in Appendix B.

2.2 Data Sources

The research team made use of numerous sources of data for this study, including publicly-available datasets (e.g., HUD's Pictures of Subsidized Housing), PHA-level and de-identified household-level data obtained from HUD, MTW Annual Reports and Plans, and an email survey of the MTW and comparison agencies.

Financial Data Systems (FDS). Abt requested and received from HUD publicly-available financial data for all MTW agencies and PHAs in the comparison sample. Abt requested financial data that was reported to HUD in the Financial Assessment Subsystem-Public Housing (FASS-PH) for the end of each agency's fiscal year 2014. Data received includes Total Operating Expenses (FDS line item 96900) for the Low Rent Public Housing Program (14.850), the Capital Fund program (14.872), the HCV program (14.871, comparison agencies only), and the MTW program (14.881, MTW agencies only).

Voucher Management System. Abt retrieved data on the Housing Choice Voucher program from HCV programmatic reports of the Voucher Management System (VMS) available on HUD's website.¹ Data from VMS includes unit months available, unit months leased, and Housing Assistance Payment costs for the HCV program by voucher type. Voucher counts and HAP costs correspond with the end of each PHA's fiscal year 2014.

50058 and 50059 Public and Indian Housing Information Center (PIC) Data. Abt received de-identified household data that PHAs are required to report in HUD Forms 50058 and 50058-MTW (Family Report) as reported in HUD's PIC in October 2015. Data received from PIC include fields for current, active public housing and voucher participants, as well as historical, panel income data for all current, active households. The historical panel data is used to track income and employment levels for current (non-elderly non-disabled) households from admission or as far as back as the data allows (2007).

PHA-Supplied Data. Some data for the performance measures was not available from HUD datasets. Abt conducted an email survey targeted to all the MTW and comparison agencies to attempt to collect this information. Abt emailed surveys to the Executive Directors of all sample agencies and additionally to the MTW Coordinators for each MTW agency. Thirty-six of the thirty-eight MTW agencies (95 percent) responded to the survey. The response rate of the comparison agencies was significantly lower; only 55 of 118 comparison agencies (47 percent) responded. Surveys were accepted between October 2015 and February 2016. In the fall of 2016, we contacted respondents to confirm information on the survey and followed up with non-respondents to give them another chance to complete the survey.

Both the MTW and comparison agency surveys addressed four areas: (1) Units preserved as affordable housing through the end of FY 2014; (2) Unmet public housing capital needs; (3) Assisted households served through partnerships to provide supportive services; and (4) Households served by (full-time equivalent) service coordinators.

The MTW agency surveys included additional questions on administrative costs and households served under the MTW HCV and public housing programs. Although the study team received FDS data for MTW agencies, MTW agencies report their operating costs for the HCV program combined with other programs in the MTW FDS column 14.881. The survey asked the MTW agency to breakout the MTW operating costs into separate operating costs for the HCV, public housing, and MTW non-traditional programs to the extent that the PHA's accounting systems can separate this information. Although publicly-available MTW Annual Reports should include MTW leasing information, Abt also requested leasing information because not all FY2014 Annual Reports were available at the time of the survey request.

¹ http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/hcv/psd

HUD's Pictures of Subsidized Housing. Abt retrieved data needed for calculating the HCV utilization rate and the public housing occupancy rate from the Pictures of Subsidized Housing (POSH) for FY 2015. These data are available on HUD's website.²

Because these data systems were not designed with these specific performance indicators in mind, we experienced some challenges in using them to create a series of metrics. These issues are part of the discussion of the results for each performance measure.

2.3 Analysis

To put the MTW PHA's performance on these measures in context, the analysis presented in this report compares estimates for their performance measures to those of the comparison, non-MTW PHAs. The analysis is done at the PHA level so the average values presented are the averages of the 38 MTW PHAs (rather than aggregating all the households at MTW PHAs and then taking the average). The averages for the comparison PHAs are calculated the same way.

Each of the MTW PHAs is given a weight of 1, so that each MTW PHA contributes equally to the estimates regardless of the size of the PHA. Likewise, the weights for the set of comparison PHAs for each of the MTW agencies sums to 1 regardless of how many comparison PHAs there are for a particular MTW PHA, and each member of the set of comparison PHAs contributes equally to comparison to the MTW PHA regardless of the size of the comparison PHAs. For example, if an MTW PHA has four comparison PHAs, the weight of each comparison PHA is 0.25; if there are five comparison PHAs, each has a weight of 0.2. In both cases, the sum of the weights for the set of comparison PHAs sums to 1. If a comparison PHA is missing information for a particular measure, the weights of the other comparison PHAs for that MTW PHA are re-calculated so that the weights for the non-missing PHAs still sum to 1. For PHAs that are comparison PHAs for multiple MTW PHAs, weights are aggregated across the MTW PHAs for which they are comparison PHAs, and thus are larger than the weights for other comparison PHAs. The average weight for comparison agencies is 0.32.

For each of the estimates of means in this paper, we place an asterisk next to differences that are statistically different at the 10 percent level of significance. When performance measures are available for all or most PHAs (at least 34), we take the average value estimate to be for the full MTW population with no sampling error. In these cases, if the MTW estimate is outside the 90 percent confidence interval then the difference is marked as statistically significant with an asterisk. If fewer than 34 MTW PHAs have information available for a performance measure, we treat both the MTW and comparison-PHA estimates as sample estimates and conduct the standard t-test. For some performance measures, we also present the medians and the number of MTW PHAs that are above the average of their comparison PHAs, but do not conduct statistical significance tests for these estimates.

2.4 Characteristics of Sample

Comparison PHAs should face similar service populations, rental markets, and agency capacities as their MTW peers. Choosing comparison PHAs similar to MTW agencies on characteristics that would most impact performance is an important strategy to 'control' for local socio-economic factors and reduce potential bias in our estimates. In selecting comparison PHAs, we put a high priority on comparison

² <https://www.huduser.gov/portal/datasets/assthsg.html>

PHAs being in a similar size category, and we initially required that comparison PHAs have the same programs as their MTW PHA—either HCV only or both HCV and public housing. Exhibit 1 shows these characteristics for the MTW and comparison PHAs.

Exhibit 1: Type and Size of MTW and Comparison PHAs

Characteristic	MTW PHAs (n=38)	Comparison PHAs (n=118)
PHA Type		
HCV Only	5.3%	8.9%
PH and HCV	94.7%	91.1%
HCV Size		
Mean HCV Size	8,349	6,897
Median HCV Size	4,516	3,568
1 to 1,249	13.2%	15.1%
1,250 to 3,999	29.0%	37.9%
4,000 to 9,999	29.0%	27.6%
>= 10,000	29.0%	19.5%
PH Size		
Mean PH Size	3,059	3,217
Median PH Size	1,282	1,063
0	5.3%	8.9%
1 to 1,249	42.1%	48.4%
1,250 to 3,999	26.3%	26.5%
4,000 to 9,999	18.4%	12.9%
>= 10,000	7.9%	3.3%
Total PHA Size (HCV + PH Units)		
Mean PH Size	11,408	10,114
Median PH Size	6,483	5,515
1 to 1,249	7.9%	8.4%
1,250 to 3,999	23.7%	32.2%
4,000 to 9,999	23.7%	33.0%
10,000 to 19,999	29.0%	13.6%
>= 20,000	15.8%	12.8%

Sources: Picture of Subsidized Housing 2013, by PHA (based on 2010 census geographies). Available at:
<http://www.huduser.gov/portal/datasets/picture/yearlydata.html#download-tab>

Notes: Comparison PHAs are weighted. Nationally, the average PHA HCV size is 1,063, the average PH size is 377, and the average combined size is 912: the median PHA HCV size is 318, the median PH size is 105, and the median combined size is 190.

Nearly all of the MTW PHAs operate both HCV and public housing programs (94.7 percent), while a slightly smaller share of matched PHAs operate both programs (91.1 percent).³ The reason for the difference is that we were not finding good matches for some MTW PHAs with large HCV programs and small public housing programs. As a result, we relaxed the requirement that the comparison PHAs for these MTW PHAs had to have both a public housing and voucher program.

The MTW and comparison PHAs have similarly-sized public housing programs. The MTW PHAs have somewhat larger HCV programs and thus larger programs overall. The biggest difference in size for the HCV program between MTW PHAs and comparison PHAs is in the largest category (>10,000 HCV slots), with 29.0 percent of the MTW PHAs in this category and only 19.5 percent of the comparison PHAs. Both the MTW and comparison PHAs are much larger than the typical PHA: the average-sized PHA has a combined total (HCV plus Public housing) of 912 units, whereas the MTW average is 11,408 units and the comparison PHA average is 10,114 units.

Community characteristics of MTW and comparison PHAs are shown in Exhibit 2. Both groups are quite similar on all of these characteristics. The share of both groups of PHAs in each geographic region is very similar, with the largest share of PHAs in the West (approximately 36% in both groups) and the South (29% of MTW PHAs and 27% of comparison PHAs). The selection criteria for the comparison PHAs required that they be in the same Census Division as the MTW PHA, but this was relaxed for several—mostly larger—PHAs for which there were not enough good matches in the same Census Division.

The MTW and comparison PHAs are also very similar in terms of community economic indicators for the rental market (two-bedroom FMR) and community income levels (average income of renters and poverty rate) and labor market (unemployment rate). For example, the two-bedroom FMR is \$1,112 in MTW PHAs and \$1,081 in comparison PHAs), while the average unemployment rate is exactly the same in both sets of communities: 6.1 percent.

³ There are 39 PHAs that received MTW awards, however two of these PHAs (Santa Clara County and the City of San Jose) operate a joint program and thus are counted as one PHA in our analyses, which is why our maximum PHA size is 38.

Exhibit 2: Community Characteristics of MTW and Comparison PHAs

Characteristic	MTW PHAs (n=38)	Comparison PHAs (n=118)
Region		
Northeast	18.4%	20.2%
Midwest	15.8%	16.6%
South	29.0%	27.0%
West	36.8%	36.3%
Two-Bedroom Fair Market Rent		
Mean Two-Bedroom FMR	\$1,112	\$1,081
Median Two-Bedroom FMR	\$1,023	\$944
\$999 or less	50.0%	58.5%
\$1,000 to \$1,499	42.1%	27.8%
\$1,500 or more	7.9%	13.7%
County Poverty Rate		
Average (Mean)	15.5%	15.3%
Median	15.3%	15.6%
<=10 %	10.5%	10.7%
>10 to 20%	76.3%	79.5%
>20 %	13.2%	9.8%
Median County Income for Renters		
Average (Mean)	\$36,600	\$35,401
Median	\$33,672	\$32,295
< \$31,000	31.6%	41.9%
\$31,000 to \$42,999	42.1%	36.5%
\$43,000 or more	26.3%	21.6%
County Unemployment Rate		
Average (Mean)	6.1%	6.1%
Median	5.9%	6.0%
< 5.0%	31.6%	22.0%
5.0% - 6.0%	21.1%	29.0%
6.1% - 7.3%	21.1%	35.6%
7.4% or more	26.3%	13.4%

Sources: FMR: Fair Market Rents (2015 Final Data), County-Level. Available at: HUDuser.gov; Poverty Rate: 2009-2013 ACS 5-Year Estimates Table S1701, County Level. Available at factfinder.census.gov; Median Income for Renters: Census.gov: ACS 5-Year Estimates Table S2503 – Financial Characteristics, County Level. Available at: factfinder.census.gov; Unemployment rate: Bureau of Labor Statistics: Labor force data by county, not seasonally adjusted, 2014 Annual Averages. Available at: bls.gov; Region: Census Regions and Divisions of the United States. Available at: census.gov.

Notes: Comparison PHAs are weighted.

3. Performance Measures for Cost Effectiveness

One of the three statutory goals of the MTW program is to “Reduce cost and achieve greater cost effectiveness in Federal expenditures.” For the cost effectiveness measures, we:

- Specified agency-level measures of administrative and operating costs rather than savings from particular policy changes;
- Measured costs on a per-unit basis to account for different size PHAs; and
- Reported adjusted costs that take into account differences of the cost of labor and rental housing in different areas of the country.

While we determined that cost effectiveness performance should be measured at the agency level, we recognize that many people interested improving rental assistance programs are looking to MTW to identify specific policy changes that improve efficiency or achieve other important goals and should thus be offered to all agencies. However, for PHAs that have adopted multiple policy changes, it can be difficult to accurately estimate the savings that may be attributable to any one policy change. Also, the change may have been made years ago and it may not be possible to determine what effect the change has on costs in later years. An agency-wide measure should capture the effect of current and past changes on the efficiency of running housing assistance programs this year. We think that a one-time evaluation or a PHA-specific evaluation that could examine the specific activity in more detail is a better way for capturing the effects of individual programmatic changes than annual performance measures, although a performance measurement system can help identify which agencies to focus an evaluation on. It is also important to note that many of the MTW agencies reporting cost savings from increased administrative efficiencies have also reported reinvesting these savings into additional programs or enhanced customer service. Thus it may be difficult to see the results of these cost savings efforts at the agency level.

In addition to the administrative and operating cost measures, we included a measure for voucher subsidy costs. PHAs have little control over the rents in their jurisdiction and so have somewhat less control over subsidy costs than over administrative costs. Subsidy costs greatly outweigh administrative costs however. Therefore if an agency really wants to focus on improving cost effectiveness, it is important to focus on per-unit subsidy costs as well as per-unit administrative costs.

Administrative costs of vouchers and operating costs of public housing are important summary measures of cost effectiveness. If these measures were to become part of a performance measurement system, the FDS (or another data collection system) would need to be designed to ensure that the measures are comparable across PHAs. The reporting system should also automatically make the calculations of costs per unit and prompt the PHA to review the per-unit costs for accuracy.

The specific cost-effectiveness indicators and the results from our analysis of costs are shown in Exhibit 3. As explained in Section 2, the estimates reported throughout

MTW agency the Lincoln Housing Authority (LHA) reports that the time saved from changing to biennial recertification's for elderly and disabled households allows staff more time to work individually with assisted households and to administer special voucher programs such as Mainstream Vouchers, VASH, and Enhanced Vouchers without hiring additional staff. LHA also used the savings to create a 12-hour tenant education program for LHA tenants and others in the community.

this report are averages of PHA-level averages. For household-level variables such as the average housing assistance payment (HAP), we calculated the average HAP for each PHA and then averaged this PHA-level HAP average across the PHAs. This averaging ensures that each MTW PHA has the same weight in the estimate regardless of the size of the PHA. For the comparison PHAs, the estimates are weighted so that each member of a group of comparison PHAs matched to a MTW PHA has the same weight and the sum of those weights equal 1.

The top panel of Exhibit 3 shows that the average HAP amount for MTW PHAs and comparison PHAs are very similar. To take into account differences in rental costs in different parts of the country, we adjusted HAP amounts based on the Fair Market Rent in each PHA's jurisdiction. Estimates are adjusted up if the PHA's FMR is below average nationally and adjusted down if the PHA's FMR is above average. The adjusted averages are almost exactly the same, with MTW PHAs averaging \$44 per year higher (\$3.67 per month) than the comparison PHAs. We also compared the average HAP amount for each MTW PHA to the average of its comparison PHAs and found that about half of the MTW PHAs had a lower HAP (17 of 36 MTW PHAs), and half had a higher HAP (19 of 36 PHAs).

The middle panel shows the average administrative costs per full-time equivalent year of voucher assistance (i.e., per 12 months of unit months leased). To take into account differences in labor costs, we adjusted these costs by differences in wage rates across metropolitan areas. The adjusted average costs are \$163 higher per FTE voucher per year for MTW PHAs. The median administrative costs are much closer together, and 15 of the 35 MTW PHAs have lower estimates of administrative costs per voucher than their comparison PHAs. The median costs suggest that part of the higher cost for MTW PHAs is being driven by extreme values. MTW PHAs may experience higher administrative fees per voucher because of the additional services attached to many MTW vouchers or added customer services. Higher costs may also be a result of shorter lengths of stay/higher turnover rates experienced at MTW agencies, and thus more costly new admissions. (See Section 8 for measures on resident length of stay.)

In addition, it should be noted that HCV administrative fee costs for MTW agencies were not available from administrative data because the current reporting system combines HCV administrative costs with all other MTW costs not used for operating public housing (e.g., supportive services and non-traditional housing assistance). This measure combines a survey response on costs and administrative data on number of voucher months leased, which may introduce non-sampling error. Although we cannot determine if there is non-sampling error or how large it might be, we are less certain of the estimates because the source of the data is not from audited FDS data.

The bottom panel shows the average annual operating costs per occupied public housing unit adjusted for local wage rates. These estimates indicate that the average costs per public housing unit for MTW agencies are \$144 higher per year, which is not a statistically significant difference.

Exhibit 3: Costs per Unit of Housing Assistance, 2014

Performance Measure	MTW PHAs	Comparison PHAs	Difference Between MTW and Comparison PHAs Mean	90% Confidence Interval for Comparison PHA Mean
HCV HAP Costs Per Voucher-Year Leased, Adjusted^A				
	(n=36)	(n=113)		
PHA Average	\$7,406	\$7,362	\$44	\$7,231 – \$7,492
PHA Median	\$7,170	\$7,304	-\$134	--
# of MTW PHAs that have lower adjusted HAP costs than the average of their comparison PHAs	17 of 36	--	--	--
HCV Administrative Costs Per-Voucher Leased, Adjusted^B				
	(n=35)	(n=113)		
PHA Average	\$946	\$783	\$163*	\$752 – \$814
PHA Median	\$820	\$770	\$50	--
# of MTW PHAs that have lower adjusted admin. costs than the average of their comparison PHAs	15 of 35	--	--	--
Annual Public Housing Operating Costs per Occupied Unit, Adjusted^B				
	(n=35)	(n=106)		
PHA Average	\$7,133	\$6,989	\$144	\$6,719 – \$7,258
PHA Median	\$6,734	\$6,757	-\$23	--
# of MTW PHAs that have lower adjusted operating costs than the average of their comparison PHAs	17 of 35	--	--	--

^A HAP costs are adjusted by differences in two-bedroom FMRs across PHAs (i.e., if the PHA's two-bedroom FMR is 5 percent higher than the national average, the adjusted costs are reduced by 5 percent to estimate costs at the national average FMRs).

^B Costs adjusted by differences in wage rates across counties using the Quarterly Census of Employment and Wages (QCEW) for all workers in the PHA's county (i.e., if wage rates in county are 5 percent above the national average, the unadjusted costs are reduced by 5 percent for the PHA to estimate costs at the national average wage rate).

Sources: MTW PHA data on HCV administrative fee costs are from the MTW PHA Survey (FY2014 costs) and the number of voucher-unit years of assistance for MTW PHAs are from the Pictures of Subsidized Housing (POSH). All the remaining MTW data and all comparison PHA data are from the FDS for FY2014.

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs are weighted. Voucher and HAP costs do not reflect costs of special program vouchers not normally covered by MTW (e.g., VASH, FUP, and NED).

The estimates reported in Exhibit 3 exclude two outliers. One MTW PHA that reported HCV administrative costs on the survey was excluded from the estimates because its costs were more than twice as high per unit as the next highest PHA (in both groups, MTW PHAs and comparisons). Similarly, one MTW PHA was excluded from the analysis of public housing operating costs because its per-unit cost was less than half of the next lowest PHA's cost. We excluded these costs despite confirmation from the PHAs that they were not data entry errors.

4. Performance Measures for Economic Self-Sufficiency

The second statutory goal of the MTW program is to help residents move toward self-sufficiency. The full version of this objective is: “Give incentives to families with children where the head of household is working, is seeking work, or is preparing for work by participating in job training, educational programs, or programs that assist people to obtain employment and become economically self-sufficient.” MTW agencies have undertaken many activities to help achieve this goal, including establishing rent structures that encourage work (e.g., charging a lower percent of income in rent), exempting earnings increases from requiring interim recertification of income, implementing work requirements, and providing supportive services to overcome barriers to work. To capture the effect of these activities, the principal performance measure for the self-sufficiency measures is defined in terms of household earnings:

- The percent of non-elderly, non-disabled households that have experienced earnings growth since admission to the assisted housing program; and
- The average annual change in household earnings since admission.

These self-sufficiency measures all focus on non-elderly, non-disabled households. We recognize that some of the households that participate in economic self-sufficiency programs will be headed by a person who is elderly or a person who has a disability. The share of these households participating in these activities is likely to be small, and if we include all the elderly or disabled households in the measurement of earnings growth, the growth in earnings measure will be artificially small. Earnings measures including all assisted households will include a lot of people that will not participate in economic self-sufficiency activities.

While we focused on changes in household earnings measuring progress toward self-sufficiency, we also recommend performance measures for the share of households making positive exits from assisted housing (i.e., exits that suggest self-sufficiency). Therefore, this measure could not be implemented at this time because most PHAs do not collect data on the nature of exits from assisted housing. Nonetheless, we think a performance measurement system should include this measure and that PHAs should be required to report on it going forward.⁴

Earnings Growth of Non-Elderly, Non-Disabled Households

The estimates presented in Exhibit 4 track growth in earnings for non-elderly and non-disabled households who were admitted after the PHA signed their MTW agreement and still assisted in 2014. Because of data limitations, we could only go back as far as 2007. For MTW PHAs that signed agreements prior to that time, we only analyzed new admissions from 2007 through 2014. Comparison PHAs were limited to same period as the MTW PHA to which they were being compared. To be included

⁴ Households leave housing assistance for many different reasons, including reasons that would broadly be described as positive (increasing earnings to the point they can afford market-rate housing or homeownership), as well as reasons that are potentially negative (such as an inability or unwillingness to comply with HUD rules). Other households leave for unknown reasons. For these reasons, we counsel against simply measuring the number of households that leave subsidized housing, and instead focus on positive exits. Positive exits can also be difficult to define and measure, particularly because a substantial share of households that leave subsidized housing do not fill out an exit interview or otherwise report this information to the PHA. However, we are aware that a number of MTW PHAs have been tracking household exits and believe that exit measures could be implemented as part of a future performance measurement system.

in the analysis, a household had to have income records at least one year, and a PHA had to have at least 50 households meeting this criterion to be included.

Exhibit 4: Earnings Growth of Non-Elderly, Non-Disabled Households Admitted After MTW Designation (in \$2014)

Performance Measure	MTW PHAs (n=34)	Comparison PHAs (n=99)	Difference Between MTW and Comparison PHAs	90% Confidence Interval for Comparison PHA Estimate
All Non-Elderly, Non-Disabled PHA Households (Average PHA Percent/Dollars)				
Increased earnings at follow-up	46.2%	42.7%	3.5%*	41.8% - 43.6%
Decreased earnings at follow-up	29.9%	27.8%	2.1%*	27.1% - 28.6%
Same earnings	24.0%	29.5%	-5.5%*	28.2% - 30.7%
Annual change in earnings	\$639	\$700	-\$61	\$638 - \$762
PHA Households with No Earnings at Baseline				
Average PHA percent of households with no earnings at baseline	39.3%	47.5%	-8.2%*	46.0% - 49.1%
Of PHA Households with No Earnings at Baseline (Average PHA Percent)				
No earnings at follow-up	53.5%	60.0%	-6.5%*	58.8% - 61.2%
Have earnings at follow-up	46.5%	40.0%	6.5%*	38.8% - 41.2%
Average earnings at follow-up for households with earnings	\$15,982	\$15,778	\$204	\$15,345 - \$16,211
PHA Households Earnings at Baseline (Average PHA Percent/Dollars)				
Earnings at baseline	60.7%	52.5%	8.2%*	50.9% - 54.0%
Of PHA Households with Earnings at Baseline (Average PHA Percent/Dollars)				
Increased earnings at follow-up	43.0%	41.3%	1.7%*	40.4% - 42.1%
Decreased to zero earnings at follow-up	22.6%	26.8%	-4.2%*	25.8% - 27.8%
Decreased earnings at follow-up, but still have earnings	34.4%	31.9%	2.5%*	31.2% - 32.6%
Average earnings at follow-up	\$15,953	\$14,162	\$1,791*	\$13,625 - \$14,699
Average earnings at baseline	\$18,223	\$16,621	\$1,602*	\$16,115 - \$17,127
Average change in household earnings from baseline to follow-up	-\$2,271	-\$2,459	\$188	(\$2,679) - (\$2,239)

Sources: Income data: PIC panel data from HUD, January 2007 through December 2014. Inflation adjustment from the Bureau of Labor Statistics' Consumer Price Index for urban wage earners and clerical workers, available at: http://data.bls.gov/timeseries/CWUR0000SA0?output_view=pct_12mths.

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs weighted. Due to data limitations, income records before 2007 were not available. Therefore, analysis includes households receiving assistance in 2014 that were newly admitted in 2007 and later for MTW agreements signed in 2007 or earlier and for the year the MTW agreement was

signed or later for agreements signed in 2008 or later. To be included in the analysis, the household had to have baseline and follow-up income records at least one-year apart.

The estimates show that household earnings were more likely to increase at MTW PHAs than at comparison PHAs. The top panel of the exhibit shows that the average share of assisted households with increased household earnings since admission is 46.2 percent for MTW PHAs, compared to 42.7 percent at the comparison PHAs. However, the MTW PHAs also had a larger share of households with decreased earnings, and there is no difference in the average annual dollar growth in earnings across the two groups. MTW PHAs also had fewer households who reported zero earnings. Having fewer zero-earning households would naturally produce a higher number of earnings decreases for MTW agencies because households with zero earnings are not able to decrease earnings. Given the large share of comparison PHA households with no change in earnings (almost entirely zero earners in both periods); we determined the best way to understand earnings growth changes was to analyze zero earners and positive earners at baseline separately, as shown in the middle and bottom panels.

The middle panel shows the analysis for households that had zero earnings at baseline (2007 or when the MTW agency signed their MTW agreement). MTW PHAs had a smaller share of households with zero earnings at baseline, 39.3 percent compared to 47.5 percent at comparison PHAs. While the majority of zero earners were still zero earners at follow-up in 2014, the average share of households that had positive earnings at follow-up was significantly higher for MTW PHAs than comparison PHAs (46.5 percent vs 40.0 percent). The average earnings for households now working is similar at a little under \$16,000 per year.

The bottom panel shows the analysis for households that had positive earnings at baseline. MTW PHAs had a larger share of households with positive earnings at baseline (60.7 percent vs. 52.5 percent at comparison PHAs) and a higher share with increased earnings at the follow-up (43.0 percent vs. 41.3 percent) than the comparison PHAs. While both MTW and comparison PHAs had a large share of these households with decreased earnings at follow-up, the MTW PHAs have a lower share that went from positive earnings at baseline to zero earnings at follow-up (22.6 percent vs. 26.8 percent). The average earnings at baseline and follow-up were higher for the MTW PHAs, but the difference in earnings did not grow by a statistically significant amount.

Coupled with its time-limited flat voucher subsidy, the Tacoma Housing Authority (THA) instituted an enhanced supportive services program using MTW funding flexibility. The goal of the enhanced supportive services program is getting work-able people ready for steady employment within five years. A voluntary program, residents can meet one-on-one with case managers who link them to community services provided by partners. THA monitors earned income and if income does not increase, case managers are more proactive in engaging residents in educational or employment activities. Residents in the enhanced program are also enrolled in HUD's Family Self Sufficiency program when they enroll in the enhanced supportive services program. As of 2014, 200 families are enrolled in the joint program.

Overall, MTW PHAs had a higher share of earners at baseline and follow-up, and a higher share of MTW households had positive earnings growth, both for new admissions as a whole and separately for those who had zero earnings or positive earnings at baseline.

5. Performance Measures for the Quantity and Quality of Affordable Housing

The third statutory goal of the MTW program is to “Increase housing choices for low-income families.” MTW activities to increase choice can be categorized into three areas: increasing the quantity and quality of housing; providing services to help people to stabilize their housing and avoid institutionalized settings, and expanding the geographical choices for assisted households.⁵ This chapter focuses on performance measures for the quantity and quality of affordable housing, and subsequent chapters focus on the other two categories of increasing housing choice.

Providing quality affordable housing is the core mission of all PHAs. Performance measures for the quantity of housing assistance provided cover the:

- Utilization of available voucher slots and public housing units;
- Change from baseline (start of each PHA’s entry into MTW) in the number of year-round equivalent vouchers used and public housing units occupied; and
- Amount of non-traditional housing assistance provided by MTW PHAs; and

Performance measures for the quality of housing assistance provided cover:

- HUD’s Real Estate Assessment Center’s (REAC) physical inspection score for public housing developments;
- Estimated unmet capital needs; and
- The amount of other affordable housing in the community preserved by the PHA.

An additional proposed measure of housing quality is the number of unit-years added to the life of the agency public housing stock through modernization and other investment activities. We did not try to collect data for this measure because we were advised that most PHAs do not currently collect this information.

The Voucher Utilization and Public Housing Occupancy Rates

The average and median voucher utilization rates and public housing occupancy rates for MTW PHAs and their comparison PHAs are shown in Exhibit 5. The voucher utilization rate is the percentage of units leased rather than the percentage of budget used. The results, based on data from Pictures of Subsidized Housing FY 2015, indicate that MTW PHAs have an average voucher utilization rate of 89.3 percent, which is lower than the 90.7 percent average for the comparison PHAs. In a direct comparison of each MTW PHA to its matched group of comparison PHAs, 17 of the 38 MTW PHAs had a higher voucher utilization rate than their comparison PHAs.⁶

⁵ For a list of MTW activities in each category, see: Khadduri et al. (2014). “Innovations in the Moving to Work Demonstration.” Public and Affordable Housing Research Corporation, a HAI Group company, Cheshire, CT.

⁶ We also replicated these calculations with FY2014 FDS data and found a higher utilization rate for MTW PHAs (92.2 percent), but similar to the POSH data, the MTW rate is slightly lower than the average for comparison PHAs (93.4 percent). We reported the POSH data in the exhibit to keep the data sources for vouchers and public housing the same.

The average public housing occupancy rate is almost exactly the same in MTW PHAS (92.7 percent) and comparison PHAs (92.5 percent). In a direct comparison, 18 of the 33 MTW PHAs have a higher public housing occupancy rate than their comparison PHAs.

Exhibit 5: Voucher Utilization and Public Housing Occupancy Rates, FY 2015

Performance Measure	MTW PHAs	Comparison PHAs	Difference between MTW and Comparison PHAs (percentage points)	90% Confidence Interval for Comparison PHA Estimate
Utilization of Available Voucher Slots				
Sample size	(n=38)	(n=117)		
Average PHA utilization rate	89.3%	90.7%	-1.4%*	89.5 – 91.8%
Median PHA utilization rate	90.5%	92.0%	-1.5%	--
# of MTW PHAs that have higher utilization rates than the average rate of their comparison PHAs	17 of 38	--	--	--
Occupancy Rate of Public Housing				
Sample	(n= 33)	(n = 97)		
Average PHA occupancy rate	92.7%	92.5%	0.2%	91.2 - 93.9%
Median occupancy rate	94.0%	95.0%	-1.0%	--
# of MTW PHAs that have higher occupancy rates than the average rate of their comparison PHAs	18 of 33	--	--	--

Sources: Picture of Subsidized Housing (POSH), 2015 data from <https://www.huduser.gov/portal/datasets/picture/yearlydata.html>. POSH data on total HCV units and number occupied are from HUDCAPS and VMS and total public housing units and occupied units are from PIC. <https://www.huduser.gov/portal/picture2008/Introduction%20to%20web%20application.pdf>

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs weighted. One comparison PHA was excluded from the voucher utilization rate analysis because of an implausible utilization rate (164 percent) and large fluctuation in the PHA’s number of vouchers between 2014 and 2015. Comparison PHA utilization rates were capped at 100 percent (affected 3 comparison PHAs) and no MTW PHAs utilization rates exceeded 100 percent.

To understand how utilization rates and occupancy rates have changed in MTW PHAs relative to comparison PHAs and whether MTW PHAs are serving more or fewer households than they could have in view of their funding amounts, it would be necessary to compare utilization and occupancy rates from baseline (the start of MTW for an agency) to the current time, based on the funding available over time. Unfortunately, we cannot do that, as we do not have baseline utilization and occupancy rates, and we do not have funding histories. However, we have some information from some MTW agencies, which report the baseline number of vouchers utilized and number of public housing units occupied or the combined

total in one of their recent MTW Annual Reports. Based on those reports, we compared the combined total of HCV and public housing units in FY 2014 to the combined total of units at baseline.⁷ Of the 23 MTW PHAs with data available for both years, 14 of the 23 reported an increase in the combined total of vouchers utilized and public housing units occupied, for a net increase of 12,718 additional assisted households across these 23 MTW PHAs. What we do not know is the extent to which those increases resulted from increases in funding available to the MTW PHAs—for example, from funds allocated for vouchers to protect the occupants of HUD-assisted properties that left the assisted housing stock during that period.

The MTW email survey also asked about the current number of year-round equivalent households served. We compared this information to the baseline information from the Annual Reports, and the findings were similar: 12 of the 22 MTW PHAs reported an increase in the number of households served, for a net increase of 14,385 additional assisted households across the 22 PHAs.⁸

Non-Traditional Assistance Provided by MTW PHAs

MTW agencies are able to use their block grant authority to implement local, non-traditional activities for low-income households, as long as the activities meet one of the three MTW statutory objectives and the households served have income below 80 percent of Area Median Income. MTW funds can be used to support housing assistance and services for residents served by the PHA outside of the traditional public housing and Housing Choice Voucher programs. HUD Notice PIH 2011-45 clarifies the regulations for four categories of allowed nontraditional activities: (1) rental subsidy programs including both property-based assistance tied to specific affordable housing units and tenant-based rental assistance; (2) housing development programs such as tax credit developments and gap financing for affordable housing; (3) resident services programs; and (4) homeownership programs. Many MTW agencies point to these non-traditional programs as evidence they are expanding the quantity of affordable housing in their local communities through the MTW program.

Beginning with the 2014 MTW Annual Report, MTW agencies are asked to report the number of non-traditional housing units (both tenant- and property-based)⁹ administered each year as well as the number of households served through programs that provide supportive services only (without housing assistance). We obtained non-traditional data for 35 out of 38 MTW agencies. Annual Reports were available for 28 PHAs; non-traditional data was obtained for seven additional agencies from the study's survey of MTW agencies.

The amount of non-traditional housing assistance provided by MTW PHAs is provided in Exhibit 6. Fourteen MTW agencies report that they administered property-based non-traditional assistance, and 18 agencies report that they administered tenant-based non-traditional housing assistance in fiscal year 2014. For the agencies

⁷ Too few PHAs reported both their baseline and current year number of vouchers utilized and public housing units occupied to compare the program totals separately.

⁸ Note that the sample composition changed with the different data sources: 19 MTW PHAs were in both comparisons. 4 MTW PHAs were only in the comparison relying solely on Annual Report data; and 3 MTW PHAs were only in the comparison that used survey (current numbers) and Annual Report data (baseline numbers).

⁹ Property-based non-traditional assistance could include Low Income Housing Tax Credit (LIHTC) households if MTW funds were used for development costs or as a subsidy, as well as households that benefit from MTW funds that are not direct rental subsidies but are used in the development of below-market rate units restricted to eligible households.

reporting administering non-traditional assistance programs, the average number of property-based units administered was 390 per year, and the average number of tenant-based assistance units was 136 units per year. Combined, the MTW agencies reported administering a total of 7,909 non-traditional units of housing assistance in fiscal year 2014 including 5,455 units of property-based assistance and 2,454 units of tenant-based assistance. One of the challenges in counting non-traditional assistance is that some MTW PHAs consider their whole program non-traditional. We did not include their counts in this exhibit, but instead tried to count only housing assistance that was not counted in either the public housing and HCV counts of people served.

HUD also asked MTW agencies to report the number of households served through services only programs that are funded through MTW single-fund flexibility. Twenty-seven MTW agencies provided data on services-only program in their 2014 Annual Reports, with most responding that they do not provide such assistance. Of the six agencies that report MTW services-only programs, the average number of households served per year under these programs is 1,274. Combined, the six agencies report serving more than 7,600 households through these programs in fiscal year 2014. On the survey, we also asked MTW agencies to report on the number of households receiving housing assistance that are provided supportive services through formal partnerships with local service providers, which we report in Chapter 6 (Promoting Residential Stability).

Exhibit 6: Non-Traditional Assistance (not Housing Choice Vouchers or Public Housing) provided by MTW Agencies

Performance Measure	MTW PHAs
MTW-Funded Non-Traditional Property-Based Assistance (unit years)	
Number of MTW PHAs providing this assistance	14 out of 35 MTW PHAS that provided information
Average per MTW PHA that provide this assistance	390
Median at MTW PHAs that provide this assistance	81
Total number of units years of assistance	5,455
MTW-Funded Non-Traditional Tenant-Based Assistance (unit years)	
Number of MTW PHAs providing this assistance	18 out of 35 MTW PHAS that provided information
Average per MTW PHA that provide this assistance	136
Median at MTW PHAs that provide this assistance	85
Total number of units years of assistance	2,454
Number of Households provided MTW-Funded Services Only (households per Year)	
Number of MTW PHAs providing this assistance	6 out of 27 MTW PHAS that provided information
Average number of households served per MTW PHA that provide this assistance per year	1,274
Median number of households at MTW PHAs that provide this assistance per year	630
Total Number of households assisted (services only)	7,643

Sources: 2014 MTW Annual Reports (28 PHAs) and email survey of MTW agencies in fall 2015 (7 PHAs).

Notes: 2,820 of the 5,455 (51.6 percent) non-traditional property-based units are from Atlanta.

REAC Physical Inspection Scores for Public Housing

Providing access to a quality place to live is a key component of HUD’s housing assistance programs. For example, in the HCV program, all units must pass a Housing Quality Standard (HQS) inspection by the PHA’s inspector before a tenant can move in, and usually each year the participant lives there. In the public housing program, all developments are inspected annually (or every two or three years if development receives a high score) by an inspector from HUD’s Real Estate Assessment Center (REAC). One indicator of the quality of public housing provided is the physical inspection score from the REAC inspector.

REAC scores are based on 100-point scale, with 35 points based on the dwelling unit, 20 points on the building systems, and 15 points each on common areas, the building exterior, and the site.¹⁰ Scores below 80 require an annual inspection while scores above 80 have either biannual or triannual inspections. The PHA averages are higher for MTW PHAs, with the MTW PHA average at 83.9 and the comparison PHA average at 82.0.¹¹ MTW PHAs are also more likely to be in the highest category (REAC score above 90 requiring inspections every three years) and 22 of the 36 MTW PHAs have a higher REAC score than their comparison PHAs.

Exhibit 7: REAC Physical Inspection Scores for Public Housing Developments

Performance Measure	MTW PHAs (n=36)	Comparison PHAs (n=107)	Difference Between MTW and Comparison PHAs	90% Confidence Interval for Comparison PHA Estimate
PHA average REAC physical inspection score	83.9	82.0	1.9*	80.5 – 83.5
Percent of PHAs with average REAC physical inspection scores:				
90 or higher (Standard 1) ^A	41.7%	20.5%	21.2%*	14.0 – 27.0%
80 – 89 (Standard 2)	27.8%	42.7%	-14.9%*	34.8 – 50.7%
60 – 79 (Standard 3)	27.8%	35.2%	-7.4%	27.5 – 42.9%
<60 (Below Standard)	2.8%	1.6%	1.2%	0.00 – 3.7%
# of MTW PHAs with higher average physical inspection score than their comparison PHAs	22 of 36	--	--	--

^A Properties in Standard 1 range get inspected every 3 years, properties in Standard 2 range get inspected every 2 years, and properties in Standard 3 range get inspected every year. A passing score is 60 or above.

Sources: HUD Physical Inspection Scores. Available at: <http://www.huduser.gov/portal/datasets/pis.html>.

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs are weighted. REAC physical inspections scores are available by PHA development and were aggregated to the PHA level by weighting each development with a score by the number of units in the developments (based on development level counts provided by HUD). We used the 2014 score, and if not available, used (in order) 2015, 2013, or 2012. The two MTW PHAs that are HCV-only were not included in the analysis.

¹⁰ If all 5 scoring areas are not relevant for a property, the other scores are weighted up to a 100-point scale.

¹¹ If additional work is done with this performance measure, it would be use

These results are for one time period only and do not show whether MTW or comparison PHAs have improved more or less since an agency became MTW. The results just indicate that as of 2014, the MTW PHAs tend to have higher scores.

Unmet Capital Public Housing Needs

One of the benefits of MTW single fund flexibility is the ability to comingle operating subsidy and capital development funds. Based on this flexibility, some MTW agencies have been able to dedicate additional MTW funds (over and above Capital Funds received from HUD each year) toward the preservation and rehabilitation of their public housing developments.

To help understand whether MTW agencies are better able to meet the capital needs of their developments, in the PHA survey we asked MTW and comparison agencies to estimate the extent of unmet capital needs in their public housing stock as of fiscal year 2014. As PHAs are only required to conduct physical needs assessments every five years, the dates of the reported estimates ranged between 2010 and 2016. PHAs provided estimates of capital needs from a variety of sources, and 44 percent of agencies reported more than one source of information. Most PHAs (65 percent of MTW PHAs and 87 percent of comparison PHAs) reported cost estimates based on their most recent physical needs assessment. Other sources of cost estimates of unmet capital needs included five-year plans, PHA staff input, resident input, ADA requirements, and REAC inspections.

We received survey results from 22 MTW PHAs and 35 comparison PHAs. Exhibit 8 presents the comparison. Overall, MTW PHAs report more units with unmet needs, but the difference is not statistically significant with this small sample. However, the share of units with unmet needs at MTW PHA is statistically significantly smaller (76.6 percent vs. 90.3 percent) and 14 of the 22 MTW PHAs have a smaller share of units with unmet needs than their comparison PHAs.

The middle panel shows unmet needs by cost. The costs per unit vary considerably for both groups of agencies. Ranges of unmet capital needs reflect differences in ages of public housing developments, construction costs among different communities, and the extent to which PHAs have a backlog of maintenance and modernization needs. Some agencies report per-unit costs of less than \$5,000 per unit, showing needs for minor repairs and system updates, while others report estimated per-unit costs of \$75,000 and higher, representing a need for major renovation or reconstruction. There are a few outliers in both the MTW and comparison samples, most of which can be attributed to major renovations or dispositions of public housing. Two MTW agencies report per unit costs that are much higher than other agencies (approximately \$79,000 and \$187,000 per unit). Both of these PHAs are participating in the HUD Rental Assistance Demonstration (RAD) to recapitalize their public housing developments and convert them into project-based rent subsidies. Likewise, four comparison agencies report per unit capital needs costs ranging between \$78,000 and \$169,000 per unit. Three of these agencies report they are undertaking major renovations of their public housing stock; the fourth PHA reports approximately \$90,000 per unit of unmet health and safety needs until their public housing developments can be demolished and reconstructed. Nevertheless, when averaged across PHAs, MTW and comparison PHAs have very similar estimates of cost per unit of unmet need, and while MTW PHAs have lower estimated unmet needs per unit of public housing, the difference is not statistically significant.

The results are based on small samples of both MTW and comparison PHAs, and the PHA estimates come from a variety of sources. We cannot determine from this data whether the MTW estimate of capital needs has decreased since the start of each agency's MTW participation because we do not have historical estimates of capital needs. However, the bottom panel provides staff perceptions of whether unmet needs

at their PHA have gone up or down over the last five years. In the PHA survey, we asked whether their agency's capital needs have increased, decreased, or stayed the same in the last five years. The clear difference in self-reports is that MTW PHAs are more likely than comparison PHAs to report their unmet needs have not changed whereas comparison PHAs are more likely to report their unmet needs have increased. But neither the quantitative estimates nor PHA staff perceptions of unmet need are definitive because of the small sample of each group that answered these questions.

Exhibit 8: Unmet Capital Needs

Performance Measure	MTW PHAs (n=22)	Comparison PHAs (n=35)	Difference Between MTW and Comparison PHAs	90% Confidence Interval for Comparison PHA Estimate
Units with Unmet Need				
PHA average of estimated unmet capital needs – number of units	2,038 units	1,424 units	614	956 – 1,891 units
PHA average share of units with unmet capital needs as percent of PH stock	76.6%	90.3%	-13.7%*	85.3% - 95.3%
# of MTW PHAs with smaller share of units with unmet capital needs than their comparison agencies	14 of 22	--	--	--
Dollars of Unmet Need				
Average estimated unmet capital needs per unit with unmet capital need	\$25,097	\$25,666	-\$569	\$20,376 – \$30,956
Average estimated unmet capital needs per unit (of all PH)	\$21,444	\$23,042	-\$1,598	\$18,480 – \$27,603
Median estimated unmet capital needs per unit of all PH	\$15,504	\$18,094	-\$2,590	--
PHA report of capital needs change in last 5 years				
	(n =23)	(n =39)		
Decreased	17%	11%	6%	2.4% - 19.4%
Stayed the same	57%	16%	41%*	6.1% - 26.3%
Increased	26%	73%	-47%*	60.7% - 85.1%

Source: Email survey of PHAs in fall 2015.

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs weighted.

Preservation of Affordable Housing

Given the substantial policy interest in ensuring that government-assisted rental units are preserved as affordable housing once their affordability restrictions expire, we have included a measure that reflects the number of units preserved through the end of each agency's fiscal year 2014. We define preservation as a transaction to refinance, recapitalize, or otherwise strengthen the financing or improve the conditions of a housing development that has a project-based subsidy other than public housing or project-based

vouchers (for example, Low Income Housing Tax Credit, Section 202/811, and Section 8 new construction projects). This definition includes project-basing of vouchers to maintain affordability of a housing development.

We asked PHAs to report the number of units preserved since the agency’s admission into the MTW program through 2014 and limited their comparison PHAs to the same period. About half of both MTW and comparison agencies report preservation activity. Although the MTW average share of units preserved is significantly higher (200 versus 126 at comparison PHAs), the number of units preserved at both sets of agencies relative to the size of the agency is the same at 2.3 percent of their PH and HCV portfolio.

Exhibit 9: Preservation of Affordable Housing

Performance Measure	MTW PHAs (n=34)	Comparison PHAs (n=73)	Difference Between MTW and Comparison PHAs	90% Confidence Interval for Comparison PHA Estimate
Preservation of Affordable Housing Since More Recent of MTW Agreement Signed or Last 10 Years				
Average # of units preserved as affordable housing	200	126	74*	90 – 162
Median # of units preserved as affordable housing	11	0	11	
Preserved affordable housing as a percent of current total PHA units (PH + HCV)	2.3%	2.3%	0.0%	1.2% - 3.3%
Percent with at least 1 unit preserved	50.0%	49.7%	0.3%	39.9% - 59.5%

Sources: Email survey of PHAs in fall 2015; Picture of Subsidized Housing 2015. Available at: <http://www.huduser.gov/portal/datasets/picture/yearlydata.html#download-tab>.

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs weighted. PHA sample size in this exhibit counts comparison PHAs multiple times if used as comparison PHA for multiple MTW agencies.

The Philadelphia Housing Authority is an MTW agency that has prioritized preservation activity as part of its “6 in 5 initiative.” According to Philadelphia’s FY 2014 MTW Plan, “The goal is to create or preserve 6,000 units of affordable housing over a five-year period, subject to funding availability and successful negotiation with partner agencies and/or developers. Units will be primarily developed or acquired in a three-pronged approach including: 1) PHA acting as developer; 2) Preservation of units that are nearing the end of the LIHTC compliance period (in partnership with the Pennsylvania Housing Finance Agency); and 3) Open solicitation of development proposals.”

6. Performance Measures for Promoting Residential Stability for Targeted Populations

This chapter discusses performance measures for promoting residential stability for targeted populations as part of the MTW objective “Increase housing choice for low-income families.” The idea is that by providing services that help participants maintain their housing and overcome barriers, the PHA is increasing the housing choices available to their participants. The performance measures reported here are:

- The number of households in targeted populations that are served by external service providers that commit services to those receiving housing subsidies; and
- The number of full-time equivalent service coordinators.

We also proposed two other performance measures that we did not attempt to collect data on for this report because of the difficulty capturing information retrospectively. The first of these measures would show outcomes of PHA attempts to provide housing stability for targeted populations. It is:

- The share of targeted households that either remain stably housed or have a positive exit from housing assistance (e.g., rent a unit without assistance).

The other performance measure would capture PHA efforts to provide appropriate housing for people with disabilities or elderly people. It is:

- The number of units constructed or modified to meet the needs of people with physical disabilities, including elderly people aging in place.

Service Partnerships

A number of MTW agencies have partnered with nonprofit organizations to provide housing subsidies in return for commitments by the nonprofit to provide services for targeted populations.¹² Data on service partnerships were collected on the email survey of PHAs, which asked for the number of households in each targeted category that were served through formal partnerships with organizations outside the PHA that committed services to assisted households. We also included an open category. The PHA responses suggest that the intensity and duration of the services vary, and a substantial number of the services are provided for broad groups of people outside the targeted categories listed (e.g., children, single parents) or for groups that overlapped with the targeted population (e.g., a broader group of elderly households that include the targeted group we identified as the frail elderly). We removed all the partnerships that clearly did not serve the targeted population or were paid for with funds not normally covered by MTW grants (such as partnerships with veteran’s agencies in the Veterans Affairs Supportive Housing (VASH))

¹² The nine groups we listed are people that are: (1) over age 75 or elderly with ADL impairments (frail elderly); (2) disabled; (3) formerly homeless; (4) transitioning from incarceration; (5) youth transitioning from foster care; (6) victims of domestic violence; (7) living with HIV or AIDs; (8) in respite from medical care; and (9) veterans.

program). We also followed up with many PHAs to confirm the partnerships met the definition, but we were not able to confirm with all PHAs and did not distinguish between services provided daily, weekly, and monthly.

With those caveats about the data in mind, we found that 28 of the 34 MTW PHAs that completed this survey question reported having a formal service partnership and that these partnerships served an average of 819 households. As can be seen in Exhibit 10, comparison agencies were less likely to have service partnerships, served fewer people, and, on average, served a significantly smaller share of their participants than MTW agencies through service partnerships: 3.9 percent at comparison agencies compared to 8.2 percent at MTW agencies.

Exhibit 10: Service Partnerships for Targeted Households Receiving Assistance

Performance Measure	MTW PHAs (n=34)	Comparison PHAs (n = 55)	Difference Between MTW and Comparison PHAs (percentage points)	90% Confidence Interval for Comparison PHA Estimate
Service Partnerships for Targeted Households Receiving Housing Assistance				
PHA average number of households served	819	306	513*	139 – 474
Percent of all of the PHA’s households	8.2%	3.9%	4.3%*	1.9% - 5.8%
Number of PHAs that have service partnerships	28 of 34 PHAs	35 of 55 PHAs	--	

Source: Email survey of MTW and Comparison PHAs in fall 2015.

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs weighted. Targeted households listed in the survey are those with people that are: (1) over age 75 or elderly with ADL impairments (frail elderly); (2) disabled; (3) formerly homeless; (4) transitioning from incarceration; (5) youth transitioning from foster care; (6) victims of domestic violence; (7) living with HIV or AIDs; (8) in respite from medical care; and (9) veterans.

The results indicate that MTW agencies are more likely to formally partner with external service providers to serve targeted households. However, given the difficulty in answering questions about partnerships and the amount of follow-up needed to improve accuracy, to be considered for a performance measure moving forward, the definition for service partnerships to include would need to be revisited and refined.

Service Coordinators

The second measure captures services that PHAs are likely to provide directly to their participants and to either one of the targeted populations or to a broader (less targeted) population. Data on service coordinators were also collected from the email survey and included the number of service coordinators employed by the PHA that connect housing assistant recipients with supportive services in the community. PHAs were asked to include only service coordinators funded by their regular HCV and public housing funds (or MTW funds for MTW agencies) and to exclude service coordinators funded by other programs such as ROSS and FSS or that serve people funded by other programs such as VASH.

The results shown in Exhibit 11 indicate that MTW PHAs are more likely to have a service coordinator and have a higher average number of FTE service coordinators per PHA. Overall, 20 of the 33 MTW

PHAs (60.6 percent) have at least one service coordinator, compared to 24 of 54 (44.4 percent) of comparison PHAs. MTW agencies also have an average of 4 full-time equivalent service coordinators, which is statistically significantly higher than the 1.8 service coordinators for comparison PHAs. While the point estimates for MTW agencies are higher in each category (elderly or disabled public housing; non-elderly, non-disabled public housing; and HCV program), only the number of HCV service coordinators is statistically significantly higher: 1.4 per MTW agency compared to 0.2 for comparison agencies. This result is driven by the fact that a much higher share of MTW agencies have service coordinators serving HCV households (48.5 percent) relative to comparison agencies (11.1 percent).

Exhibit 11: Service Coordinators

Performance Measure	MTW PHAs (n=33)	Comparison PHAs (n=54)	Difference Between MTW and Comparison PHAs	90% Confidence Interval for Comparison PHA Estimate
Total Number of Full-Time Equivalent Service Coordinators				
PHA average # of FTE service coordinators	4.0	1.8	2.2*	1.0 – 2.7
PHA median # of FTE service coordinators	1.0	0.0	1.0	--
Number of PHAs with a Service Coordinator	20 of 33 PHAs	24 of 54 PHAs	--	--
Service Coordinators for Elderly or Disabled Households in Public Housing				
PHA Average # of FTE service coordinators	1.4	0.9	0.5	0.5 – 1.3
Number of PHAs with Service Coordinator	12 of 33 PHAs	22 of 54 PHAs	--	--
Service Coordinators for non-elderly, non-disabled Households in Public Housing				
PHA average # of FTE service coordinators	1.2	0.8	0.4	0.4 – 1.2
Number of PHAs with a Service Coordinator	16 of 33 PHAs	20 of 54 PHAs	--	--
Service Coordinators for HCV Households				
PHA average # of FTE service coordinators	1.4	0.2	1.2*	0.0 – 0.3
Number of PHAs with a Service Coordinator	16 of 33 PHAs	6 of 54 PHAs	--	--

Sources: Source: Email survey of MTW and Comparison PHAs in fall 2015.

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs are weighted. One MTW PHA was excluded because the PHA had an extremely large number of service coordinators relative to all other PHAs (167 service coordinators compared to next highest of 20 service coordinators).

7. Performance Measures for Expanding Geographical Choices of Assisted Households

This chapter discusses performance measures for expanding geographical choices of assisted households as part of the MTW objective of “Increase housing choices for low-income families.” The measures cover the following:

- Portability: the ability of households to use vouchers outside a PHA’s jurisdiction.
- Project-basing: the share of voucher assistance attached to specific units.
- Neighborhood poverty rate: the poverty rate of the census tract where participants live relative to the poverty rate of other census tracts in the PHA’s jurisdiction (or the broader metropolitan area).

Portability

One of the key pillars of the choice part of the Housing Choice Voucher program is the ability of participants to use their voucher in a location of their choice—even if it outside the issuing PHA’s geographic jurisdiction—by “porting.” The amount of porting-in and porting-out at a PHA is one indication of the freedom of participants to exercise this choice. A complete picture of porting activity would include both ports that are absorbed by the receiving PHA as well as ports that are administered by the receiving PHA. We have only a partial picture because we do not have data on ports that were absorbed. However, we do have information on the number of port-outs from a PHA that are administered by the receiving PHA and the number of port-ins that a receiving PHA administers rather than absorbs.

The results shown in Exhibit 12 indicate that there are non-trivial shares of both MTW and comparison PHAs’ vouchers that are being administered by other PHAs (port-outs), as well as a large share of other PHA’s vouchers that the MTW and comparison PHAs are administering. On average, a smaller share of MTW PHA’s vouchers (2.6 percent) than comparison PHA’s vouchers (3.1 percent) are being administered by other PHAs, but the opposite is true for port-ins. Port-ins being administered by MTW PHAs are a higher share of their total vouchers (4.3 percent) than for comparison PHAs (3.2 percent).

Among both MTW and comparison PHAs, there are housing authorities on both extremes, with some PHAs have almost no ports-ins or port-outs that have not been absorbed and some with 1,000s. MTW PHAs have a higher share of PHAs on both extremes for port-outs being administered by other PHAs: 9 of the 38 MTW PHAs (23.7 percent) have 10 or fewer port-outs, compared to only 5 of 118 non-MTW PHAs (4.2 percent); likewise, 3 MTW PHAs (7.8 percent) have more than 1,000 port outs, as do three comparison PHAs (2.5 percent). For port-ins, MTW PHAs are less likely to be on the low end of the extreme, with 8 PHAs (21.1 percent) having 10 or fewer compared to 46 comparison PHAs (39.0 percent) Both groups are roughly equally likely to have more than 1,000 port-ins (2 MTW PHAs or 5.3 percent vs. 5 comparison PHAs or 4.2 percent).

Given participants’ movement from one PHA’s geographic area to another as represented by non-absorbed ports, it does not seem that MTW authority affects voucher participants’ ability to move outside their PHA’s jurisdiction.

Exhibit 12: Portability

Performance Measure	MTW PHAs (n=38)	Comparison PHAs (n=118)	Difference Between MTW and Comparison PHAs	90% Confidence Interval for Comparison PHA Estimate
Port-Outs				
PHA Average # of agency's vouchers that are administered by other agencies	228.2	172.7	55.5 vouchers*	122.7 - 222.7
Median # of port outs	64.0	75.3	-11.3 vouchers	--
Average PHA percent of port-outs as a percentage of all their vouchers	2.6%	3.1%	-0.5 %.*	2.7% - 3.6%
Port-Ins				
PHA Average # of vouchers being administered for other agencies	251.3	130.7	120.6 vouchers*	85.1 - 176.2
Median # of port-ins	137.6	22.3	115.3 vouchers	--
Average PHA percent of port-ins as a percentage of all their vouchers	4.3%	3.2%	1.1 %*	2.2% - 4.1%

Sources: HUD: FY 2013 & 2014 VMS Reports; available at:

http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/hcv/psd

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs weighted. Information about port-ins and port-outs that have been absorbed by the receiving agency are not available and thus not included in this exhibit.

Project-Based Units

Project-basing units—that is, attaching tenant-based vouchers to specific units—can help improve voucher holders' choices if the units are higher quality or in better neighborhoods than housing units that voucher holders can find on the open market or if the units are attached to supportive services that the household needs.

HUD rules allow a PHA to project-base up to 20 percent of its voucher assistance if the owner to be project-based agrees to either rehabilitate or construct the units or the owner agrees to set-aside a portion of the units in an existing development. MTW PHAs have the flexibility to project-base a larger share of their voucher assistance. Only four (10.5 percent) of MTW PHAs exceed the 20 percent threshold, and the highest share is 29.1 percent. On the other extreme, 10 MTW PHAs (26.5 percent) do not have any project-based vouchers. Nevertheless, MTW PHAs use project-basing more than comparison PHAs: the average MTW PHA share of project-based units is 8.0 percent, compared to 4.7 percent for the comparison PHAs.

Exhibit 13: Project-Based Vouchers

Performance Measure	MTW PHAs (n=38)	Comparison PHAs (n=118)	Difference Between MTW and Comparison PHAs	90% Confidence Interval for Comparison PHA Estimate
Project Basing of Housing Choice Vouchers				
Average PHA percent of vouchers that are project-based	8.0%	4.7%	3.3 %*	3.9% to 5.5%
Median PHA Percent of vouchers that are project-based	7.5%	2.4%	5.1 %.	--
Number of MTW PHAs with higher share of project-based units than their comparison PHAs	21 of 38	--	--	--
Zero vouchers project-based	10 of 38	39 of 118	--	--
>20 percent of vouchers project-based	4 of 38	2 of 118	--	--

Sources: HUD: FY 2013 & 2014 VMS Reports; available at:

http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/hcv/psd

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs weighted.

Poverty Rate of Participants' Neighborhoods

This measure tracks PHA efforts to expand options for residents to live in neighborhoods that offer heightened levels of opportunity. Poverty concentration is only one of several areas that should be taken into consideration in assessing opportunity, but it has the benefits of being standardized across the country and being correlated with many of the other indicators of interest. Our measures focus on poverty concentration as a marker of opportunity.

Because the poverty rate for the metro area can be quite different from the poverty rate for the city, and because the use of vouchers is not limited to the city or county in which the PHA is based, we analyzed access to lower poverty neighborhoods using both the city- and metro-wide standards. Comparisons between MTW and non-MTW PHAs in the share of voucher households living in neighborhoods with various poverty rates are shown in Exhibit 14.

Using household income data and Census tract data, we compared the poverty rates of each PHA's jurisdiction (city, county, or state) and the metro area in which the housing authority is based against the poverty rates of the neighborhoods where voucher holders actually live. We found very few differences and no statistically significant differences in the poverty rates of neighborhoods of voucher holders between the MTW PHAs and comparison PHAs. Overall, approximately three-fourths of voucher holders in both groups live in neighborhoods with poverty rates higher than the median poverty rate for the PHA's jurisdiction. Only 26.3 percent of MTW voucher holders and 26.5 percent of comparison PHA voucher holders live in neighborhoods with poverty rates lower than the median poverty rate of the

agency's overall jurisdiction. In addition, relatively few voucher holders live in census tracts where the poverty rate is in the lowest 25th percentile of the PHA's jurisdiction. Only 7.6 percent of MTW voucher holders and 7.5 percent of comparable PHA voucher holders live in these census tracts. Thirteen of the 38 MTW agencies had a higher share of voucher holders living in census tracts where the poverty rate was the lowest 25th percentile of the PHA's jurisdiction.

The differences are similarly minor when we compare the poverty rates of MTW and comparison agency voucher holder neighborhoods against the poverty rates of the metro area in which the PHA's main office is located. We also found no statistically significant differences between the poverty rates of neighborhoods of MTW and comparison agency voucher holders at the metro level. For this measure, even fewer MTW agencies had a higher share of voucher holders living in areas where the poverty rates in the lowest 25th percentile for the PHA's metro area.

PHAs face a number of difficulties acquiring buildings in low poverty areas such as high acquisition and maintenance costs. Similarly, voucher holders often have difficulty locating units in low poverty areas due to higher rental costs not meeting payment standards, fewer large units to accommodate families, and landlord discrimination against voucher holders, families with children, and households of color.

The Housing Authority of the County of San Bernardino (HACSB) hired an independent firm to conduct a local rent study of its service area, which covers the largest geographic area of any county in the contiguous United States. Based on their findings, in April 2011 HACSB implemented separate payment standards for the nine submarkets that comprise its service area. Payment standards range from 50 to 130 percent of FMR, reflecting significant variation in housing costs across submarkets. In addition to enabling voucher holders to choose units in higher-priced areas with the greatest access to jobs and high-performing schools, HACSB reports that the tiered payment standards promote more efficient use of HACSB resources by limiting subsidy levels in low-rent areas to market levels. Whereas the previous system allowed families to lease some of the most expensive homes in lower-priced areas, HACSB perceives the new system as reflecting a more rational distribution of housing assistance.

Exhibit 14: Poverty Rate Relative to PHA Jurisdiction and Metro Area

Performance Measure	MTW PHAs (n=38)	Comparison PHAs (n=118)	Difference Between MTW and Comparison PHAs	90% Confidence Interval for Comparison PHA Estimate
Share of voucher households that live in neighborhoods with poverty rates:				
<= 10%	14.5%	14.1%	0.4%	12.2% - 15.9%
>10% - 20%	27.3%	29.7%	-2.4%*	27.8% - 31.6%
>20 to 30%	26.7%	24.9%	1.8%*	23.4% - 26.4%
> 30%	31.6%	31.3%	0.3%	28.4% - 34.3%
Share of voucher households that live in neighborhoods with poverty rates compared to PHA's jurisdiction:				
Below the median for the city/county in which the PHA is based	26.3%	26.5%	-0.2%	24.6% - 28.4%
In the lowest 25 th percentile for the city/county in which the PHA is based	7.6%	7.5%	0.1%	6.6% - 8.4%
Number of MTW PHAs with a higher share of voucher holders in the lowest 25 th percent of its city/county than their comparison agencies	13 of 38 PHAs	--	--	--
Share of voucher households that live in neighborhoods with poverty rates compared to PHA's Metro Area:				
Below the median for the metro area in which the PHA is based	16.9%	18.3%	-1.4%	16.8% - 19.9%
In the lowest 25 th percentile for the metro area in which the PHA is based	5.4%	5.4%	0.0%	4.7% - 6.1%
Number of MTW PHAs with a higher share of voucher holders in the lowest 25 th percent of the metro area than their comparison agencies	10 of 38 PHAs	--	--	--

Sources: Census tract-level poverty data: ACS table S1701 "Poverty Status in the Past 12 Months," 2014 5-year estimates; Available at: http://factfinder.census.gov/faces/nav/jsf/pages/download_center.xhtml. Metro, county, and place linking dataset: University of Missouri MARBLE; Available at: <http://mc2.missouri.edu/websas/geocorr2k.html>

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs weighted.

8. Other Key Metrics

There are other important measures of an MTW PHA's performance that do not fit into the categories we have used based on the goals of the MTW program. This chapter reports on the following measures:

- Household income relative to area median income (AMI) for newly-admitted households and all current households;
- Rent burden of currently-assisted households; and
- Length of stay for currently-assisted households.

Income Level of Assisted Households

The MTW statute only requires that 75 percent of voucher households that the MTW agency admits have very low incomes (income less than 50 percent of AMI), whereas 75 percent of voucher households admitted by non-MTW PHAs have to have extremely low incomes (income less than or equal to 30 percent of AMI). However, because the income distribution of newly-admitted households is of central importance from a policy perspective given the goals of subsidized rental housing, it is important to know if this rule difference appears to have a substantial effect on the income distribution of newly-admitted households. Using PIC household data, we looked at household incomes of public housing and voucher households admitted between July 2014 and June 2015 for MTW and comparison PHAs. The income levels of assisted households are presented in Exhibit 15.

For voucher holders, the share of new admissions with very low income at both MTW and comparison agencies both exceed the non-MTW requirement of 75 percent of households, however, MTW agencies have a smaller, statistically significant, share of these households (77.7 percent) than comparison agencies (80.8 percent). MTW agencies admit more people above 30 percent of AMI, particularly households in the 50 to 80 percent of AMI range, and the distribution of income for their current voucher households reflect this difference, but to a lesser degree.

MTW and comparison agencies admit a higher share of extremely low income households to public housing, both exceeding 80 percent of new admissions. The only statistically significant difference is that MTW agencies admit a higher share of households in the 50 to 80 of AMI range: 4.4 percent at MTW agencies compared to 2.7 percent at comparison agencies. The income distributions of current households are similar for MTW and comparison agencies.

Exhibit 15: Income of Assisted Households Relative to Area Median Income

Performance Measure	MTW PHAs	Comparison PHAs	Difference Between MTW and Comparison PHAs	90% Confidence Interval for Comparison PHA Estimate
Income of Assisted Households				
Share of Newly Admitted Voucher Households with Income Relative to AMI of				
	(n = 38)	(n = 116)		
at or below 30%	77.7%	80.8%	-3.1%*	79.3% - 82.2%
>30% and <=50%	19.0%	17.9%	1.1%	16.5% - 19.2%
>50% and <=80%	3.1%	1.3%	1.8%*	1.0% - 1.6%
Share of All Voucher Households with Income Relative to AMI of				
	(n = 38)	(n = 116)		
at or below 30%	79.8%	80.2%	-0.4%	79.6% - 80.8%
>30% and <=50%	14.4%	15.6%	-1.2%*	15.1% - 16.0%
>50% and <=80%	4.8%	3.9%	0.9%*	3.6% - 4.2%
>80%	0.9%	0.3%	0.6%*	0.3% - 0.4%
Share of Newly Admitted Public Housing Households with Income Relative to AMI of				
	(n = 33)	(n = 100)		
at or below 30%	81.2%	84.4%	-3.2%	82.8% - 86.0%
>30% and <=50%	14.3%	12.9%	1.4%	11.6% - 14.2%
>50% and <=80%	4.4%	2.7%	1.7%*	2.1% - 3.2%
Share of All Public Housing Households with Income Relative to AMI of				
	(n = 36)	(n = 105)		
at or below <=30%	79.5%	78.9%	0.6%	77.5% - 80.3%
>30% and <=50%	13.2%	14.3%	-1.1%*	13.5% - 15.0%
>50% and <=80%	5.4%	5.0%	0.4%	4.5% - 5.5%
>80%	1.9%	1.8%	0.1%	1.3% - 2.2%

Sources: PIC/50058 panel data: received from HUD's Office of Policy Development and Research. Median Income for Renters: FY2015 Data for Section 8 Income Limits; available at: HUDuser.gov.

Notes: The sample size for public housing analysis is lower than for voucher households due to non-applicable program types (voucher-only PHAs do not have public housing records) and missing data on newly admitted public housing households for three MTW PHAs and five comparison PHAs.

Rent Burden of Assisted Households

The study developed measures to examine the extent to which residents of MTW agencies have average higher rent burdens than residents of non-MTW agencies. Public housing and HCV regulations stipulate that residents typically pay no more than 30 percent of their adjusted income toward their total housing costs (rent plus utilities). MTW agencies can and often do adopt policies that alter the amount that MTW residents pay toward their housing costs. These policies can take a number of forms, ranging from comprehensive changes in how rent is calculated, including decoupling rent from income entirely, to smaller reforms such as changes in how deductions or asset income are considered. For example, some MTW agencies have elected to raise the minimum rent of MTW households beyond the \$50 minimum rent conventional PHAs are allowed to charge. Some MTW agencies have also lifted the standard HCV

requirement that voucher holders pay no more than 40 percent of their adjusted income at initial lease up in order to increase the opportunity for voucher holders to lease up in higher rent areas.¹³

While many MTW agencies that adopted changes to rent calculations have the goal of increasing the economic self-sufficiency of residents or increasing housing choice, these policies can also lead to increases in the size of the average tenant contributions to rent. Exhibit 16 presents the average share of gross income spent toward rent for MTW and comparison PHAs in the HCV and public housing programs for currently assisted households. We have very small sample sizes for this comparison (16 MTW agencies and 63 comparison agencies), because of incomplete data.¹⁴ As a workaround, we excluded all PHAs with more than 1 percent of households that had missing total tenant payment, thus reducing the sample size significantly. It is not clear whether the remaining sample is representative of the MTW or comparison PHAs.

With that caveat in mind, we did not find a significant difference in the rent paid by HCV households with both MTW and comparison agency rents averaging rents above 30 percent of their gross income. MTW agencies had a smaller share of household paying under \$100 in rent (11 percent) relative to comparison agencies (13.5 percent), but the difference was not statistically significant with this small sample.

On average, MTW public housing household pay a statistically, significantly smaller share of their income for rent and utilities (27.8 percent) than public housing households at the comparison agencies (30.8 percent) even though a smaller share of MTW households pay less than \$100 in rent (10.9 percent at MTW agencies).

¹³ Tenant rent is typically 30 percent of their adjusted income plus any amount that the unit rent is above the payment standard. The standard rules as this tenant rent cannot be above 40 percent of their adjusted income.

¹⁴ Specifically, the data we received was missing total tenant payment for many households. We think that this in part due to missing data on households paying flat or ceiling rents. Rent for these households does not appear to be reported in the 50058 forms and we do not have the flag indicating whether or not the household paid such a rent.

Exhibit 16: Affordability of Housing (PHAs without missing flat/ceiling rents)

Performance Measure	MTW PHAs	Comparison PHAs	Difference Between MTW and Comparison PHAs	90% Confidence Interval for Comparison PHA Estimate
Housing Choice Vouchers				
	(n=16)	(n=63)		
PHA average share of income for housing (rent + utilities)	32.1%	31.0%	-1.1 p.p.	30.5 - 31.6%
PHA median share of income for housing (rent + utilities)	33.7%	30.7%	3.0 p.p.	-
Rent less than \$100	11.0%	13.5%	-2.5 p.p.	12.0 – 15.0%
Public Housing				
	(n=10)	(n=39)		
PHA average share of income for housing	27.8%	32.1%	-4.3 p.p.*	31.0- 33.2%
PHA median share of income for housing	27.8%	31.0%	-3.2 p.p.	-
Rent less than \$100	10.9%	14.7%	-3.8 p.p.	11.9 – 17.5%

Sources: PIC/50058 panel data; received from HUD’s Office of Policy Development and Research.

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs weighted. Rent is compared to gross income (not adjusted income). The sample sizes are small for this analysis, because we cannot tell the difference between true zero rents and rents either reported as zero because the participant pays a flat or ceiling rent. The 50058 instructs the PHA to report zero rent if the participant pays a flat or ceiling rent, but our data does not include a separate variable with the amount of the flat or ceiling rent. We exclude PHAs with more than 1 percent of records that reported the total tenant payment (TTP) and the tenant income as zero. If the household had TTP>0 and income of zero, rent burden was set to 100 percent (4 percent of MTW records and 2.5 percent of comparison PHA records).

Length of Stay in Assisted Housing

How long residents live in public housing or receive a Housing Choice Voucher subsidy can reflect a PHA’s policies. PHAs in communities with significant need for affordable housing and lengthy waiting lists may have considerable interest in serving more low income households in their communities. Some PHAs focus on reductions in the average length of stay as a measure of success in helping households move up and out of subsidized housing. Residents’ lengths of stay could also reflect the mobility of the households, terminations from assisted housing, or other reasons that are not associated with increases in household income. MTW agencies have adopted a number of policies that could lead to faster exits from subsidized housing, including time limits for assistance and employment or education requirements.

Exhibit 17 shows the average and median length of stay for assisted residents of MTW and non-MTW PHAs. As most time limits or self-sufficiency requirements adopted by MTW agencies exclude residents who are elderly or have disabilities, we limited our analyses to these same households.

The average length of stay for voucher holders of MTW PHAs is 7.4 years, compared to 8.3 years for voucher holders of comparison agencies. MTW voucher holders also are more likely to be new voucher holders; 20.2 percent of MTW voucher holders have received assistance for less than two years, compared to 12.1 percent of comparison agency voucher holders. Conversely, 64.4 percent of comparison

voucher holders received assistance for at least five years, compared to 56.0 percent of MTW voucher holders.

The average stay for public housing residents was very similar for MTW agencies and comparison agencies, 6.5 years to 6.6 years respectively. The distribution of length of stay of public housing residents was also similar for the two PHA groups.

Dates of admission were missing for 4.5 percent of MTW residents, and no dates of admission were missing for comparison PHAs. This may bias the results, showing shorter stays for MTW agencies, if the missing admission data was primarily for those with earlier admission dates.

Exhibit 17: Length of Stay of Current Non-Elderly, Non-Disabled Households in Assisted Housing

Performance Measure	MTW PHAs	Comparison PHAs	Difference Between MTW and Comparison PHAs	90% Confidence Interval for Comparison PHA Estimate
Housing Choice Vouchers				
	(n=38)	(n=116)		
Average years	7.4 years	8.3 years	-0.9 years*	8.0 - 8.5 years
Median Years	7.7 years	8.1 years	-0.4 years	-
<2 years	20.2%	12.1%	8.1 p.p.*	10.8% - 13.3%
2 to 5 years	23.8%	23.3%	0.5 p.p.	22.0% - 24.6%
5 years or more	56.0%	64.6%	-8.6 p.p.*	62.4% - 66.8%
Public Housing				
	(n=35)	(n=105)		
Average years	6.5 years	6.6 years	-0.1 years	6.3 – 7.0 years
Median Years	6.1 years	6.5 years	-0.4 years	-
<=2 years	21.4%	22.7%	-1.3 p.p.	20.3% - 25.0%
2 to 5 years	31.8%	31.2%	0.6 p.p.	29.5% - 32.9%
5 years or more	46.9%	46.2%	0.7 p.p.	43.4% - 48.9%

Sources: PIC/50058 panel data received from HUD’s Office of Policy Development and Research.

Notes: * indicates statistically significant at 10 percent significance level. Comparison PHAs are weighted. Approximately 4.5 percent of MTW records do not have year of admission year, so were excluded from this analysis. None of comparison PHA households have missing admission dates.

9. Conclusion

The MTW program allows participating PHAs to seek waivers from some regulatory rules and statutory provisions to design and test different approaches to housing assistance that meet one or more of the MTW statutory objectives of: (1) achieving greater cost effectiveness, (2) helping households make progress toward economic self-sufficiency, and (3) increasing housing choices for low-income families. This study provided the first-ever attempt to quantify the impact of these efforts across MTW agencies and compare them through a quasi-experimental design to outcomes for a similar set of peer agencies. It utilized an agency-wide approach to understand overall MTW performance, rather than tracking the impact of specific policies within or across agencies.

Using imperfect data, our findings suggest that the MTW program has succeeded in its goal of providing a vehicle for local public housing authorities to experiment with new approaches to find programs that work for their local communities. From an agency-wide perspective, MTW agencies do better on many, but not all of the comparison measures. Despite the wide variation in scores across MTW agencies, they tend to outperform their peers on the self-sufficiency and housing choice outcomes. MTW agencies are able to serve a significant number of individuals not reached by traditional housing assistance. In many cases, they are also able to offer additional supportive services that may enhance a family's ability to achieve self-sufficiency and help them exhibit higher earnings growth. MTW agencies may also be better able to extend the life of their housing stock through increased investments in their hard units.

MTW agencies tend to do worse than their peers on a few measures, such as HCV administrative costs and voucher utilization. These outcomes may be related to success in other areas such as adding service to vouchers and creating innovative non-traditional vouchers to stabilize hard-to-reach populations. Finally, in some cases, MTWs perform similarly to their peers, such as operating costs, public housing occupancy rates, and place voucher holders in lower poverty neighborhoods. Both MTW and non-MTW agencies, on average, meet the standard PHA requirements for serving extremely low-income households.

The goal of this study of the Moving to Work program was to develop performance measures for MTW PHAs to measure the extent to which the program is meeting the three core goals of the program and to test how well these performance measures could be implemented using existing data or data that could be easily reported by PHAs. We found that data for many of the measures were available from data that both MTW PHAs and PHAs without MTW authority now submit to HUD (e.g., PIC, FDS, and VMS), from MTW Annual Reports, or from data that PHAs collect for their own operational purposes. However, given the different purposes for which these data sources were designed, differences in how MTW and non-MTW PHAs report their data, and inconsistencies in the same measures across sources, it is challenging to ensure that performance measures are measured consistently across PHAs.

We believe most of the data consistency issues (both within and across PHAs) could be solved if PHAs knew in advance that the data would be used for performance measures, that the definitions for data elements were well defined, and that data quality checks were built into reporting systems.

To move forward with a performance measurement system for MTW, we recommend the following:

- **Revisit the recommended performance measures.** Revise the performance measures recommended in this study based on the MTW PHAs experience providing data for this study and their knowledge of 1) what is possible to report going forward and 2) what historical data HUD or the PHAs are able to provide. As part of this effort, the list of performance measures should be

prioritized and either reduced or introduced in batches over time to ensure a manageable burden and focus on getting accurate information for the priority indicators. During the consultation process used to develop the measures, MTW agencies made many suggestions for adding more performance measures to ensure a complete picture of performance. This will have to be weighed against the burden of providing the data. For example, data on program exits would be very useful to better understand resident self-sufficiency, yet may be expensive and difficult to collect.

- ***Create more detailed definitions of the information to be used in creating the performance measures.*** This study was trying to use existing data that was not created specifically for the defined performance measures. This led to numerous questions about how to interpret the variables used in calculating the performance measures. We recommend developing more detailed definitions of data to be reported to ensure that the performance measures can be calculated consistently across PHAs. For example, it may be important to request that data on people provided housing assistance is reported in unit months of assistance (including reports of non-traditional housing assistance) to ensure that the amount of housing assistance provided is consistently measured in terms of full-year round assistance rather than being ambiguous as to whether data reported is the number of households served for any length of time during the year. Appendix A lists all of the performance measures and identifies some challenges for ensuring each measure captures what is meant to be captured.
- ***Build data checks in the data collection tool.*** Whatever the source of the data used to calculate performance measures, there should be built-in checks to ensure numbers are internally consistent and, when relevant, are consistent with other data reported or calculated by HUD.
- ***Design the data collection process so that PHAs can review and verify the accuracy of their data.*** PHAs should review the final performance measures and the underlying numbers used in the calculation to verify their accuracy before the performance measures are considered final or seen by outside entities.
- ***Make most measures prospective.*** Given the challenges for obtaining accurate historical data from HUD or PHA systems, most measures will need to be measured for the current year or use recent or current data as the baseline for over-time measures.
- ***Solicit feedback from additional groups.*** Solicit feedback from MTW program advocates and critics to get their input on whether they find these measures adequate for judging the extent to which MTW is meeting program goals.
- ***Recommend measures for non-MTW PHAs.*** Most of the measures are appropriate for standard PHAs, so it should be possible to develop reporting that permits comparisons of MTW and non-MTW PHAs.

Additionally, discussion of the goals of measurement and evaluation and the specific measures and approaches chosen should be an ongoing part of agency planning. Data collection and measurement can be incorporated into information management systems and regular processes like resident touch points. Creating a culture of measurement and evaluation and using the information to adjust the program will allow PHAs to better serve their community and will help determine the success of the MTW program as a whole.

Appendix A: List of Performance Indicators by Category

Note: bolded measures were used in the report. Bracketed (and not bolded) measures were not.

Category 1: Performance Indicators for Measuring Cost Effectiveness	
Measures	Comments
<ul style="list-style-type: none"> MTW funds spent on administrative costs and services for housing vouchers (i.e., everything but HAP payments), on a per-voucher year (UML/12) basis. 	<ul style="list-style-type: none"> MTW funds are all HCV and public housing funds that HUD provides to a MTW PHA that are subject to the PHA's MTW agreement. It excludes other forms of assistance, such as FUP or VASH vouchers, that are not covered by the MTW agreement, as well as dedicated HUD funding for particular services, such as FSS Coordinator funding. For standard PHAs, funds are HUD Administrative fee (excluding FUP, NED, and VASH fees). Notes: <ul style="list-style-type: none"> This is a measure of the cost effectiveness of spending of MTW/HUD money, but does not account for any local funding or revenues used from other PHA-managed housing used for the voucher program. Because the costs of doing business varies across the United States, an adjustment for this differential in costs needs to be made for comparisons to other PHAs. We used the Quarterly Census of Employment and Wages (QCEW) for all workers at the county level for this adjustment. If cost measures are adopted for a performance measurement system, it would preferable that all cost estimates are from the audited financial statements to ensure all funding is accounted for and none is double counted. For MTW agencies that use their single fund flexibility to operate the HCV and PH program jointly, it would require estimation for assigning cost to the HCV or PH program.
<ul style="list-style-type: none"> MTW funds spent on HAP subsidy for households with a housing voucher, on a per-voucher year (UML/12) basis. 	<ul style="list-style-type: none"> This is HAP subsidy for vouchers that are usually covered in MTW agreement (so all, but FUP, NED, or VASH). Notes: <ul style="list-style-type: none"> Rents vary substantially across the United States so an adjustment for rent costs needs to be made for comparison to other PHAs. We used the two-bedroom fair market rent for this adjustment.
<ul style="list-style-type: none"> MTW funds spent on operating public housing, on a per-unit per-year basis. 	<ul style="list-style-type: none"> MTW funds spent operating public housing. Notes <ul style="list-style-type: none"> Because the costs of doing business varies across the US, an adjustment for this differential in costs needs to be made for comparisons to other PHAs. We used the Quarterly Census of Employment and Wages (QCEW) for all workers at the county level for this adjustment. With co-mingled MTW funding, it can be hard to determine what is capital spending vs. operations spending. Likewise standard PHAs may use capital spending for maintenance issues that should be covered under operating expenses. Any savings from energy performance contracts or other investments are not measured separately, but should show up in reduced operating costs or higher occupancy rates. Collection of rents from tenants is included in the spending on

Category 1: Performance Indicators for Measuring Cost Effectiveness	
Measures	Comments
	operating public housing units, but may want to consider a direct measure of rents in arrear as a percent of all rents due. This would be a measure of PHA's property management performance.
<ul style="list-style-type: none"> [MTW funds spent providing forms of housing assistance that are not public housing or HCV (i.e., non-traditional assistance), on a per-household served basis.] 	<ul style="list-style-type: none"> This is an MTW-only measure and would cover all other forms of housing assistance, such as short-term rental subsidies, security deposits, shallower subsidy assistance and sponsor-based assistance administered through contract rather than HCVs, etc. Notes: <ul style="list-style-type: none"> This measure is based on number households served, rather than the number of "units." This is because some types of non-traditional assistance are not easily translated into units, such as security deposits and other move-in expenses, and because the time-limited nature of some of these programs is important to the design, leading to more households served (but not more units). With rules on how to convert various forms of non-traditional housing assistance to unit months of assistance, measure could be cost per-unit month of assistance. Given the different types of assistance covered by this measure, it would need PHA-specific context to make it interpretable, so it would be more of an information measure to understand how deep the non-traditional subsidy assistance than a performance measure.

Category 2: Performance Indicators for Measuring Economic Self-Sufficiency	
Measures	Comments
<ul style="list-style-type: none"> • The percent of non-elderly, non-disabled households whose earnings have increased since admission to subsidized housing. • The percent of non-elderly non-disabled households whose earnings have decreased since admission to subsidized housing. • The average annual change in earnings since admission for non-elderly non-disabled households. 	<ul style="list-style-type: none"> • Calculation is from date of admission to most recent income certification for currently assisted households. For this report, we only had data from 2007 onward and analyzed only households admitted the latest of 2007 or after the MTW agreement was signed. • Annual change in earnings is defined as total change in earnings since base year divided by the number of years between the baseline and current year. • Notes: <ul style="list-style-type: none"> ○ For agencies that do not do interim recertification or only do biannual recertification, the most recent data may be older than for PHAs that do more frequent recertification. ○ We used the Bureau of Labor Statistics' Consumer Price Index for urban wage earners and clerical workers to place the earnings in constant dollars. ○ Comparing earnings across PHAs is complicated by the presence of zero earnings households at baseline: their earnings can only go up so a PHA with a high share of zero earnings has more potential to look like a good performer on these measures. For this report, we analyzed changes over time for all households and separately for households with zero and positive earnings at baseline.
<ul style="list-style-type: none"> • [Substantial earnings growth or earnings. Share of non-elderly non-disabled households whose annual earnings are (a) a minimum of \$1,200 and have increased by at least 50% since admission (b) \$6,000 higher since admission or (c) are currently at \$14,500 or more.] 	<ul style="list-style-type: none"> • This measure is an attempt to make a threshold for progress in earnings and ultimately economic sufficiency. By its nature, it requires subjectivity, which may mean it is not a good candidate for a performance management system. • Notes: <ul style="list-style-type: none"> ○ For the 50 percent earnings growth since baseline measure, baseline earnings of \$1,200 was added to ensure that the 50 percent earnings growth was at least \$600. ○ The current earnings threshold of \$14,500 was added to recognize that households above a certain earnings level may have less of an incentive to increase their earnings and/or less ability to make large earnings gains. \$14,500 was chosen because is represent full-time, year round work (40 hours per week for 50 weeks) at the minimum wage (\$7.25 per hour). ○ The \$6,000 in earnings growth since admissions was an attempt to capture substantial earnings growth for households with high enough baseline earnings that they do not meet the 50% earnings growth criterion. However, given the other criteria, it only affects households with baseline earnings between 12,000 and \$14,500. A revision to this measure might be in terms of average annual earnings growth, such as average annual earnings growth of at least \$600 per year.
<ul style="list-style-type: none"> • [Share of non-elderly non-disabled households where the head was unemployed at admission but is now employed. • Share of non-elderly non-disabled households where the head was employed 	<ul style="list-style-type: none"> • This measure focuses on employment rather than level of earnings and is for the head of household only. • Notes: <ul style="list-style-type: none"> ○ Using PIC data, unemployment would need to be defined as "zero" earnings rather than using BLS's official definition of unemployment (no working, available for work, and have recently looked for work).

Category 2: Performance Indicators for Measuring Economic Self-Sufficiency	
Measures	Comments
at admission but is now unemployed.]	<ul style="list-style-type: none"> ○ We did not use this measure in the report, but essentially analyzed whether anyone in the household was employed by separately reporting on zero earning households in our earnings growth analysis.
<ul style="list-style-type: none"> • [Share of households experiencing positive exits from subsidized housing] 	<ul style="list-style-type: none"> • This measure focuses on whether circumstances of participants improved enough that they can find stable housing without housing assistance • Positive exits could be defined as exits (1) to homeownership, (2) to market-rate rental housing in circumstances suggesting stability, and (3) due to a household being over-income • Notes: <ul style="list-style-type: none"> ○ Most PHAs do not track exits, but a few MTW PHAs have developed or are working on procedures to do so. There systems and experiences can be used to help other PHAs to start tracking exits. ○ The primary challenge tracking exits is that households leave without an exit interview, so their exit outcome is unknown. ○ Another challenge is defining whether an exit is positive, neutral (exclude from calculation?), or negative. This includes exits to nursing care facilities, other institutions, or other forms of subsidized housing.

Category 3: Performance Indicators for Measuring the Quantity and Quality of Affordable Housing	
Measures	Comments
<ul style="list-style-type: none"> Utilization rate of housing vouchers. 	<ul style="list-style-type: none"> Defined as the annualized number of households using vouchers divided by the number of voucher slots funded. Only includes vouchers typically included in MTW agreement (excludes FUP, NED, and VASH vouchers). Notes: <ul style="list-style-type: none"> Need to make sure that data used for this reflect the annualized number of households served, which is unit months of assistance divided by 12. On the survey and in MTW Annual Reports, it is sometimes not clear which is being reported. On the survey, the December point-in-time numbers exactly matched the year-round numbers for some PHAs, which raised suspicions that were not getting a year round count. Therefore, we ended up administrative data for annualized estimates of the number of households served, but these were not always consistent across sources. MTW PHAs have the flexibility to use voucher funding for non-traditional housing assistance and services or for preservation of affordable housing, so in these cases the voucher utilization may be low even if they are efficiently administering their HCV program.
<ul style="list-style-type: none"> Occupancy rate of public housing 	<ul style="list-style-type: none"> Defined as the annualized number of households living in public housing units divided by number of public housing units. Notes: <ul style="list-style-type: none"> Same note on ensuring annualized measure of households served as for voucher utilization rate. Public housing units should exclude unit months approved for non-dwelling purposes and for renovation.
<ul style="list-style-type: none"> Number of households provided with housing assistance on an annualized basis through another form of housing subsidy funded by MTW. 	<ul style="list-style-type: none"> Collected separately for property-based assistance and tenant-based assistance. MTW measure as standard PHAs cannot use their HCV or public housing money for this purpose. Notes: <ul style="list-style-type: none"> Same note on ensuring annualized measure of households served as for voucher utilization rate. Some MTW PHAs consider their whole program to be non-traditional, so report all assisted houses as non-traditional. We excluded these counts from our measure as we did not want to double count units (i.e., if all your assistance is non-traditional, then your voucher utilization rate would be zero).
<ul style="list-style-type: none"> Physical inspection (REAC) score of public housing developments 	<ul style="list-style-type: none"> These scores are by development, so we weighted development scores by the share of the PHA's units in each development. Notes: <ul style="list-style-type: none"> If a development has a REAC score above 80, it is only scored every two or three years, so the scores for a PHA are not all from the same year.
<ul style="list-style-type: none"> [Number of unit-years added to the life of the agency's public housing stock.] 	<ul style="list-style-type: none"> This measure is intended to capture the outcomes of investments that improve the sustainability of a public housing development but may not be captured in the REAC score. If, for example, modernization activities take place in 10 units and extend the useful life of each unit by 25 years, the increase in number of unit years is 250 in the year the investment is completed. We did not attempt to collect data for this measure, but instead

Category 3: Performance Indicators for Measuring the Quantity and Quality of Affordable Housing	
Measures	Comments
	<p>asked housing authorities to report on both the dollar amount and number of units with unmet capital needs for their public housing units</p> <ul style="list-style-type: none"> • Notes: <ul style="list-style-type: none"> ○ We did not have historical data on unmet capital needs, but asked for PHA staff perceptions on whether unmet needs at increased, stayed the same, or decreased in last 5 years. ○ PHAs do not re-calculate their unmet needs every year, so we asked for the most recent unmet needs estimate and recorded the year it was from. ○ IF HUD's Rental Assistance Demonstration continues to expand, it may have a large effect on both the unmet need and unit years of life of agencies' public housing stock.
<ul style="list-style-type: none"> • Number of units preserved as affordable housing. 	<ul style="list-style-type: none"> • Measured preservation activities for shorter of last 10 years or since the MTW agreement was signed (and same period for comparison PHAs). • In addition to the number of units, we also reported the number of preserved units as a fraction of the size of the PHA's program (HCV + PH units). • Our definition is that preservation refers to units of subsidized housing owned by someone other than the housing authority, and that were in danger of being lost from the subsidized inventory that were retained as subsidized housing due in substantial part to the housing authority's activity. • The survey instructions said to only count units where both of the following conditions apply: <ul style="list-style-type: none"> ○ The PHA makes a substantial contribution to the financing of the project. Examples include the acquisition of the project or such PHA assistance as the award of project-based vouchers, the issuance of a grant or long-term loan, or an investment of equity, **AND** ○ the PHA's contribution to the project was designed to help preserve the long-term affordability of units in a development deemed to be (a) at risk of physical deterioration; (b) at risk of ceasing to participate in the subsidy program; or (c) in difficult financial straits. • Notes: <ul style="list-style-type: none"> ○ This definition does not include new construction of affordable units. If substantial enough to be important to consider for performance, it would need to be added as a separate measure. ○ Project-basing of housing choice vouchers was a common preservation activity. We confirmed with as many PHAs as possible that the project-basing reported was for preservation purposes, but project-basing could be done for multiple reasons (e.g., located in opportunity area, serve a targeted population). ○ We did not put minimum expenditure amount per unit or number of years a unit was preserved for in our definition, but these options should be considered. ○ Investment in preserving a PHA's public housing will be captured in other measures, but none of the proposed measures captures investment in PHA-owned housing that is

Category 3: Performance Indicators for Measuring the Quantity and Quality of Affordable Housing	
Measures	Comments
	not public housing.

Category 4: Performance Indicators for Measuring the Promotion of Residential Stability for Targeted Households	
Measures	Comments
<ul style="list-style-type: none"> • Total number of households served in one of the following categories through partnerships that commit services to those receiving housing subsidies: <ul style="list-style-type: none"> ○ Frail elderly (over 75 or with ADL impairments) ○ People with disabilities ○ People experiencing homelessness ○ People transitioning from incarceration ○ Youth transitioning from foster care ○ Victims of domestic violence ○ People living with HIV or AIDS ○ People in respite from in-patient medical care ○ Veterans 	<ul style="list-style-type: none"> • Consistent with the performance measure in the utilization and occupancy rate category, this measure focuses on the annualized number of households served in the year, calculated as unit months / 12. • A key component of this suggested measure is the fact that the PHA has leveraged services to meet the needs of these populations. In addition to being a measure of housing resources committed to particular populations, this measure can also be understood as a measure of services leveraged. • These partnerships meant to be covered by this measure are partnerships that allow households to remain housed that might be unable to get or stay housed without these services. • Notes: <ul style="list-style-type: none"> ○ Excludes service partnerships that are part of programs not usually covered by the MTW grant, such as FUP, HOPWA, NED, and VASH. For a PHA performance measure not specific to MTW, it would be useful to capture these important services as well. ○ Agencies also reported formal partnerships for households not on this list. For example, elderly (but not defined as frail) households, single parents, or children in the household. These were not included in the reported measures. ○ A refined definition might need to define the level of services required. For example, does providing one meal a day to the frail elderly substantial increase the likelihood they can maintain their housing. Or how frequently do services need to be provided to count as services: weekly? Monthly?
<ul style="list-style-type: none"> • Number of households served by full-time equivalent service coordinator with caseload of 100 households or fewer per year. • Number of households served by full-time equivalent service coordinator with caseload of more than 100 households per year. 	<ul style="list-style-type: none"> • We reported the number of full-time equivalent service coordinators overall, for elderly or disabled public housing residents, for non-elderly and non-disabled public housing residents, and for all HCV households. We did not obtain data on the number of households actually served by these coordinators and calculations based on the number of households in each category did not seem informative for actual caseloads. • Notes: <ul style="list-style-type: none"> ○ Excludes service coordinators funded by ROSS or FSS. A performance measure for all PHAs should consider including these service coordinators as another indicator.
<ul style="list-style-type: none"> • [Number of units created or modified to meet the accessibility needs of people with physical disabilities, including elderly aging-in-place, in 	<ul style="list-style-type: none"> • We did not attempt to collect data for this measure because we it would be new data collection for PHAs. • Notes:

Category 4: Performance Indicators for Measuring the Promotion of Residential Stability for Targeted Households	
Measures	Comments
<p>each of these categories:</p> <ul style="list-style-type: none"> ○ Accessibility upgrades to existing public housing or other project-based units owned by the PHA. ○ New or substantially rehabilitated units developed according to universal design principles or similar standards of accessibility.] 	<ul style="list-style-type: none"> ○ May want to consider a second measure, which is percentage of units accessible to people with physical disabilities. This "stock" measure would complement the flow measure proposed here.
<ul style="list-style-type: none"> • [Share of targeted population successfully retained in assisted housing] 	<ul style="list-style-type: none"> • We did not attempt to collect data for this measure because we it would be new data collection for PHAs. • To compute this measure, PHAs would first look at the targeted households (identified in the first measure) who, during the year, left for reasons that are unknown, related to eviction or because of a move to a higher-care facility. The remaining households would be deemed residentially stable. (Individuals who died during the course of the year would be excluded from the calculation.) • Notes: <ul style="list-style-type: none"> ○ Should consider adding a measure to the self-sufficiency indicators that captures the share of the targeted populations that either have earnings or have gained another income source.

Category 5: Performance Indicators for Measuring The Expansion of the Geographical Scope of Assisted Housing	
Measures	Comments
<ul style="list-style-type: none"> • # of the agency's vouchers that are currently being administered by other agencies via portability (port-outs). • # of vouchers issued by other agencies that agency is administering via portability (port-ins). 	<ul style="list-style-type: none"> • In addition to reporting these measures, we also reported port-ins and port-outs as a percentage of the number of vouchers administered by the PHA. The percentage of stock measure makes it easier to compare across different-sized PHAs. • Notes: <ul style="list-style-type: none"> ○ This measure does not include port-ins that the receiving agency absorbs. If this information could be made available through PIC data or another source, it should also be included in the measure. Both absorbed and administered vouchers reflect on the ability of voucher holders to exercise geographic choice on where they live.
<ul style="list-style-type: none"> • Share of MTW-funded Housing Choice Vouchers that are project-based. 	<ul style="list-style-type: none"> • Project-basing vouchers can be used to expand resident choices in a number of ways: it can be used in development in a low-poverty area; if it is difficult to use the voucher in the rental market, then this provides an option; and it provides housing for a targeted population that can be served a supportive service partner.
<ul style="list-style-type: none"> • Share of voucher households that live in neighborhoods with poverty rates below the median for the city/county in which the PHA is based and primarily serves. • Share of voucher households that live in neighborhoods whose poverty rates are in the lowest 25th percentile for the city/county in which the PHA is based and primarily serves. • Share of voucher households that live in neighborhoods with poverty rates below the metro area median. • Share of voucher households that live in neighborhoods whose poverty rates are in the lowest 25th percentile for the metro area. 	<ul style="list-style-type: none"> • In addition to these measures, we reported the number of voucher holders by actual (not relative) neighborhood poverty rate category (e.g., < 10 percent poverty rate). • Notes: <ul style="list-style-type: none"> ○ To reduce the number of measures here, may want to pick just one as the primary measure, such as a share of voucher households that live in neighborhoods with poverty rates below the median for the city/county in which the PHA is based and primarily serves. ○ Consider reporting the same measures for the location of public housing households.

Category 6: Other Key Metrics	
Measures	Comments
<ul style="list-style-type: none"> Share of newly admitted households during the year with incomes: <ul style="list-style-type: none"> at or below 30% of AMI; above 30 percent of AMI but at or below 50 percent of AMI; above 50 percent of AMI but at or below 80 percent of AMI. 	<ul style="list-style-type: none"> This measure is to capture whether differences between MTW and Non-MTW PHAs in income requirements for new admission affects the income level of admitted households. Calculated separately for voucher and public housing households. Notes <ul style="list-style-type: none"> For non-MTW PHAs, 75 percent of households newly admitted to the voucher program have to be very low income (below 30% of AMI or below the poverty level for their household size) and 40 percent of households newly admitted to public housing have to be very low income. MTW PHAs have the same percentage requirements, but for households below 50 percent of AMI.
<ul style="list-style-type: none"> Income composition of households currently being served by HUD using same 3 income categories plus a 4th category for current assisted households with income > 80% AMI. 	<ul style="list-style-type: none"> This measure captures whether the income distribution of households that are currently assisted by the agency is different from newly admitted households.
<ul style="list-style-type: none"> Average share of gross income for housing (rent plus utilities) paid by households in the voucher program. Same measures for public housing households. 	<ul style="list-style-type: none"> This measure is included because helping households obtain affordable housing is a basic of the housing assistance programs. Notes: <ul style="list-style-type: none"> Standard PHAs calculate rent based on adjusted income, but the adjustments can vary by PHA and particularly for MTW PHAs which have more flexibility with whether to have adjustments and how to make them. We chose to base this measure on gross income to have a consistent measure of rent burden. We had data quality issues, so very of the PHAs were used in this analysis. The data we had access to did not list the rent amount if the person paid a flat or ceiling rent. Also, the MTW data did not have a total Tenant Payment variable, so we had to calculate using tenant rent and utility allowance variables and there may be reasons TTP does not match that calculation. We decided how to calculate rent burden if a household has a zero TTP or zero income: if income and TTP both equal zero, rent burden was zero. If TTP was >0 and income was zero, we coded rent burden as 100%. Likewise, if TTP was > income, we assumed a maximum rent burden of 100%. Estimates can be sensitive to these assumptions if a non-trivial amount of households fall in these categories. That is part of the draw of the rent burden measure below. Also, for households that have biennial or triennial recertifications, the household income information can be dated and may inaccurately represent current burden.
<ul style="list-style-type: none"> [Affordable rent: Share of households in the housing voucher program that are: (a) paying 40% of less of their gross income for housing (rent plus utilities) or (b) paying a minimum rent of \$100 or 	<ul style="list-style-type: none"> Measure of share of tenants paying an affordable rent. Not include in this report because of data issues with rent data discussed above. Notes: <ul style="list-style-type: none"> The 40 percent cutoff was selected to match the

Category 6: Other Key Metrics	
Measures	Comments
<p>less per month, or (c) renting a unit above their voucher size.]</p> <ul style="list-style-type: none"> • Same measure for public housing households. 	<p>maximum share-of-rent rule for the first year a voucher holder leases a unit (though that cutoff is based on adjusted income). It is also below the 50 percent-of-income for rent cutoff that is often used to describe extreme rent burden.</p> <ul style="list-style-type: none"> ○ The \$100 minimum rent is about what the inflation-adjusted minimum rent would be if it increased by the cost of inflation since the QWHRA act minimum rent rule of \$50 was instituted in 1998. ○ Households that choose a bedroom size above their voucher bedroom size appear to have made a choice that the rent is affordable to them.
<ul style="list-style-type: none"> • Length of stay for non-elderly non-disabled households. 	<ul style="list-style-type: none"> • Length of stay measure is to help understand whether the agency is able to serve more people over time by having shorter stays. • Notes: <ul style="list-style-type: none"> ○ Shorter stays does not necessarily mean that the households housing issue was solved. It has to be in context with positive exits and whether households make progress toward self-sufficiency while being assisted. ○ Might also consider a count of how many different voucher households were served over a period of 5 year as a share of voucher slots and how many public housing households as a share of public housing households. Given closed and long waiting lists, policies that serve a higher quantity of needy households over time benefit more households.

Appendix B: List of MTW and Non-MTW Comparison Agencies

PHA Code	MTW PHAs
AK001, AK901	Alaska Housing Finance Corporation
CA003	Oakland Housing Authority
CA014	Housing Authority of the County of San Mateo
CA019	Housing Authority of the County of San Bernardino
CA030	Tulare County Housing Authority
CA063	San Diego Housing Commission
CA056, CA059	Housing Authorities of Santa Clara County / San Jose
CO016	Boulder Housing Partners
CT004	Housing Authority of the City of New Haven
DC001	District of Columbia Housing Authority
DE004, DE901	Delaware State Housing Authority
FL004	Orlando Housing Authority
GA004	Housing Authority of the City of Columbus
GA006	Housing Authority of the City of Atlanta Georgia
IL002	Chicago Housing Authority
IL006	Housing Authority of Champaign County
KS053	Lawrence/Douglas County Housing Authority
KY001	Louisville Metro Housing Authority
KY004	Housing Authority of Lexington
MA003	Cambridge Housing Authority
MA005	Holyoke Housing Authority
MA901	Department of Housing & Community Development
MD002	Housing Authority Of Baltimore City
MN002	Minneapolis Public Housing Authority
NC003	Housing Authority of the City of Charlotte
NE002	Lincoln Housing Authority
NH010	Keene Housing Authority
NV001	City of Reno Housing Authority
OH031	Portage Metropolitan Housing Authority
OR002	Home Forward (formerly the Housing Authority of Portland, OR)
PA001	Housing Authority of the City of Pittsburgh
PA002	Philadelphia Housing Authority
TX006	San Antonio Housing Authority
VA019	Fairfax County Redevelopment & Housing Authority
WA001	Seattle Housing Authority
WA002	Housing Authority of King County
WA005	HA City of Tacoma
WA008	Housing Authority of the City of Vancouver

PHA Code	Non-MTW Comparison PHAs
AL001	Housing Authority of the Birmingham District
AL002	Mobile Housing Board
AL006	Housing Authority of the City of Montgomery
AL077	Tuscaloosa Housing Authority
AZ009	Housing Authority of Maricopa County
CA001	Housing Authority of the City & County of San Francisco
CA002	Housing Authority of the County of Los Angeles
CA004	Housing Authority of the City of Los Angeles
CA007	County of Sacramento Housing Authority
CA008	Housing Authority of the County of Kern
CA010	City of Richmond Housing Authority
CA011	Housing Authority of the County Contra Costa
CA023	County of Merced Housing Authority
CA024	County of San Joaquin Housing Authority
CA026	County of Stanislaus Housing Authority
CA027	Housing Authority of the County of Riverside
CA028	Housing Authority of Fresno County
CA044	Housing Authority of the County of Yolo
CA067	Alameda County Housing Authority
CA094	Orange County Housing Authority
CA104	City of Anaheim Housing Authority
CA108	Housing Authority of the County of San Diego
CO028	Housing Authority of the City of Colorado Springs
CO041	Fort Collins Housing Authority
CT001	Housing Authority of the City of Bridgeport
CT003	Housing Authority of the City of Hartford
CT005	Housing Authority of the City of New Britain
CT007	Housing Authority of the City of Stamford
CT039	Housing Authority of the Town of West Hartford
FL001	Jacksonville Housing Authority
FL003	Tampa Housing Authority
FL005	Miami Dade Public Housing and Community Development
FL008	Sarasota Housing Authority
GA002	Housing Authority of Savannah
GA901	Georgia Department of Community Affairs
HI003	City and County of Honolulu
HIX01	Hawaii Public Housing Authority (HI001 & HI901)
IA020	Des Moines Municipal Housing Agency
IA022	City of Iowa City Housing Authority

PHA Code	Non-MTW Comparison PHAs
IA023	Municipal Housing Agency of Council Bluffs
IL004	Springfield Housing Authority
IL015	Madison County Housing Authority
IL025	Housing Authority Cook County
IL089	Housing Authority Of The County Of DeKalb
IN015	Housing Authority of South Bend
IN022	Housing Authority of the City of Bloomington
LA001	Housing Authority of New Orleans
MA001	Lowell Housing Authority
MA002	Boston Housing Authority
MA006	Fall River Housing Authority
MA007	New Bedford Housing Authority
MA015	Medford Housing Authority
MA024	Brockton Housing Authority
MA094	Franklin County Regional Housing Authority
MA096	Greenfield Housing Authority
MA108	Chelmsford Housing Authority
MD004	Housing Opportunity Commission of Montgomery County
MD006	Hagerstown Housing Authority
MD018	Housing Commission Of Anne Arundel County
ME005	Lewiston Housing Authority
MI001	Detroit Housing Commission
MI058	Lansing Housing Commission
MI064	Ann Arbor Housing Commission
MI073	Grand Rapids Housing Commission
MN001	Public Housing Agency of the City of St Paul
MN007	Housing and Redevelopment Authority of Virginia, Minnesota
MN038	Housing and Redevelopment Authority of St. Cloud, Minnesota
MO002	Housing Authority of Kansas City, Missouri
MO007	Housing Authority of the City of Columbia, MO
MO188	Housing Authority of the City of Joplin, MO
MT001	Housing Authority of Billings
NC007	Housing Authority of the City of Asheville
NC011	Housing Authority of the City of Greensboro
NC013	The Housing Authority of the City of Durham
ND014	Fargo Housing and Redevelopment Authority
NE001	Omaha Housing Authority
NJ002	Newark Housing Authority
NJ912	State of New Jersey Department of Community Affairs (DCA)
NM001	City of Albuquerque Housing Authority

PHA Code	Non-MTW Comparison PHAs
NM009	Santa Fe Civic Housing Authority
NY001	Syracuse Housing Authority
NY005	New York City Housing Authority
NY041	Rochester Housing Authority
NY110	NYC Department of Housing Preservation and Development
NY904	NYS Housing Trust Fund Corporation
NY002, NY449	Buffalo Municipal Housing Authority
OH003	Cuyahoga Metropolitan Housing Authority
OH004	Cincinnati Metropolitan Housing Authority
OH022	Greene Metropolitan Housing Authority
OK002	Housing Authority of the City of Oklahoma City
OK073	Housing Authority of the City of Tulsa
OR001	Housing Authority of Clackamas County
OR006	Housing Authority & Community Services Agency of Lane County
OR022	Housing Authority of Washington County
PA006	Allegheny County Housing Authority
PA012	Montgomery County Housing Authority
RI001	Housing Authority Providence
RI002	Housing Authority of the City of Pawtucket
RI003	Woonsocket Housing Authority
RI006	Cranston Housing Authority
SC001	Housing Authority of the City of Charleston
SC002	Housing Authority of the City of Columbia
SD045	Pennington County Housing and Redevelopment Commission
TN003	Knoxville's Community Development Corp.
TN004	Chattanooga Housing Authority
TN005	Metropolitan Development & Housing Agency
TX004	Housing Authority of Fort Worth
TX005	Houston Housing Authority
TX009	Housing Authority of the City of Dallas, Texas
UT003	Housing Authority of the County of Salt Lake
UT007	Housing Authority of the City of Provo
VA003	Newport News Redevelopment & Housing Authority
VA004	Alexandria Redevelopment & Housing Authority
VA011	Roanoke Redevelopment & Housing Authority
VA025	Suffolk Redevelopment and Housing Authority
WA003	Housing Authority of the City of Bremerton
WA006	Housing Authority of the City of Everett
WA025	Housing Authority City of Bellingham