Increasing the Value of MTO Research for Housing Policy Development

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Abstract
The Moving to Opportunity (MTO) for Fair Housing demonstration has estimated the effects of two concrete reforms of low-income housing policy on one important group those reforms affected. Reforms of this type have received, and will continue to receive, serious consideration in housing policy debates. At this stage, estimating the effects of the MTO reforms on all the people they affected significantly is not feasible. Estimating the effects of two similar reforms that would have almost the same effect on the families studied in MTO, however, is feasible and desirable. These reforms would have no effect on the number of families who receive housing assistance. Instead, they would affect the nature of the housing assistance offered and the taxpayer cost of providing the assistance. One alternative reform would almost surely have generated cost savings and additional revenue exceeding the cost of the vouchers, thereby providing greater benefits than the current system at a lower taxpayer cost. The MTO results supplemented with estimates of the taxpayer cost of either reform would provide a reasonably comprehensive analysis of its effects. This article suggests how to estimate the taxpayer costs of the alternative reforms. Doing so would significantly increase the value of MTO research for housing policy development.

Introduction
The primary purpose of the Moving to Opportunity (MTO) for Fair Housing demonstration was to study the effects of better neighborhoods on a wide range of individual outcomes. However, it also produced results that are relevant for assessing the likely effects of major reforms of low-income housing policy. Literally, the final impacts evaluation (Sanbonmatsu et al., 2011) reported the effects of offering housing vouchers to families with children living in subsidized housing projects in census tracts with high poverty rates as opposed to the effects of alternatives that would have been available to these families in the absence of this offer.
Political leaders have proposed similar reforms, and some have been implemented. The Clinton Administration proposed comprehensive legislation for phasing out project-based assistance (HUD, 1995) and, in his campaign against President Clinton, Robert Dole also proposed vouchering out public housing. Although the Clinton proposals were not adopted, the Quality Housing and Work Responsibility Act of 1998 (Title V, Public Law 105-276) mandated demolishing public housing projects and providing housing vouchers to their residents under certain circumstances and allowed these actions under other circumstances. Furthermore, HOPE VI grants and other sources have funded the redevelopment of many public housing projects in census tracts with high poverty rates, and the families whose projects have been demolished have almost always been offered housing vouchers. Although MTO has produced evidence on important effects of its reforms on members of the families offered vouchers, this evidence is inadequate to judge the desirability of the reforms because MTO also affected taxpayers and the families who replaced MTO voucher recipients in subsidized housing. To maximize the benefit from MTO’s enormous investment in data collection, it is important to supplement the results in the final impacts evaluation with evidence on the effects on other individuals.

This article argues that, at this stage, producing the information needed to estimate the effects on all groups of the exact reforms MTO implemented is not feasible, but that the MTO results are applicable for assessing several similar reforms whose primary effects on other people could be estimated with reasonable effort. MTO provided substantial benefits to the families who moved into the public housing units vacated by those who accepted an MTO voucher, but it did not collect information relevant for assessing the effects of the reform on this group, and it is not feasible to assemble it now. It is feasible, however, to estimate the effects of two similar reforms that would have almost the same effect on the families studied in MTO.

The alternative reforms would have made the same voucher offer to the same families as MTO. They would have differed primarily regarding what was done with the units vacated by the public housing tenants who accepted the offered vouchers. Under one option, the units vacated by families with MTO vouchers would have been rented at market rates. Under the other option, buildings with a number of units equal to the number vacated by MTO voucher recipients, plus a fraction of the previously vacant units in the projects involved, would have been demolished and the land sold to the highest bidder. Under both alternatives, when the initial recipients give up their vouchers, those vouchers would be offered to occupants of subsidized housing projects in high-poverty census tracts. Therefore, unlike MTO, these reforms would have had no effect on the number of families who received housing assistance. They would instead have affected the nature of the housing assistance offered and the taxpayer cost of providing it. Evidence on the cost-effectiveness of different types of housing assistance strongly suggests that the second reform would have substantially reduced taxpayer cost and hence would have benefited both voucher recipients and taxpayers.

MTO research focuses heavily on the effects of the experimental group treatment that required voucher recipients to live for the first year in a census tract with a 1990 poverty rate of less than 10 percent. Because no Congress is at all likely to change the voucher program to limit participation to families willing and able to live in a low-poverty neighborhood, the MTO results on the effects of offering traditional Section 8 housing vouchers are more important for an analysis of the reforms under consideration. The points made in this article, however, are equally applicable to the low-poverty voucher option.
MTO Housing Policy Reforms

For purposes of this article, certain features of the MTO reforms are especially important. Under MTO, tenants from the public housing waiting list filled the public housing units that MTO voucher recipients vacated. Public housing authorities (PHAs) received the same operating and capital subsidies and HOPE VI grants to redevelop some of their projects that they would have received in the absence of MTO. Therefore, MTO did not affect the number of families in public housing units or their taxpayer cost. Indeed, it did not affect the budget of any other low-income housing program. It provided additional subsidies to serve the families who accepted the MTO voucher offer to leave their public housing units.

Feasibility of Comprehensive Analysis of MTO Housing Policy Reforms

The MTO final impacts evaluation indicated many beneficial effects and a few unintended negative consequences of the two reforms for the individuals in families who were offered and used MTO vouchers. Because it was not designed to provide a comprehensive analysis of the reforms, the report is silent on the reforms’ effects on two other groups—namely, taxpayers and the additional families who received the housing assistance that would have gone to MTO voucher recipients in the absence of the demonstration.

Because MTO provided additional subsidies to serve the families who accepted the voucher offer, the reforms had a cost to taxpayers. Using MTO administrative data to determine this cost in every year would surely be possible. The additional taxpayer cost of assisting the Section 8 group was the cost of providing its members with MTO vouchers. For the experimental group, the cost of mobility counseling and search assistance would be added to the cost of their vouchers. After initial lease up, some voucher recipients relinquished their vouchers to move to a publicly or privately subsidized project. Because MTO did not affect the budgets of existing low-income housing programs, however, the assistance that treatment families received from these programs is not an additional taxpayer cost.

It is very important to recognize that the additional taxpayer cost provided benefits not only to families who accepted MTO vouchers but also to the additional families who replaced those with MTO vouchers in existing programs. MTO did not collect information relevant for assessing the effects of the reform on the latter group, and this omission is important from the viewpoint of assessing the consequences of the reforms. Immediately after the initial lease up, these additional families were about as numerous as the families who used the offered vouchers. They replaced the public housing tenants who used MTO vouchers. Furthermore, the benefits to these additional families could easily have been larger than the benefits to those who used MTO vouchers, because almost all of them came from unsubsidized housing. Initially, the net benefit to the families who

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1 Taxpayers who care about the voucher recipients also benefit from the reforms. Because of our inability to estimate these altruistic benefits, comprehensive empirical analyses of the benefits and costs of the reforms are not possible. These benefits should not be forgotten, however, in assessing the desirability of the reforms.
replaced MTO voucher recipients in public housing may have been modest, because they moved to public housing projects in bad neighborhoods and often in poor condition. The immediate benefit may have resulted primarily from spending less on housing and hence consuming more of other goods. A substantial fraction of these families ultimately received larger benefits, however. About 42 percent of units in MTO housing projects were demolished under HOPE VI or some other redevelopment initiative before data collection for the final impacts evaluation. Their occupants were offered the choice between a housing voucher and a vacant unit in another (likely better) public housing project. By the time of final data collection, about one-fourth of the members of the control group (to whom the MTO demonstration did not offer vouchers) had housing vouchers. By this time, about the same fraction of the families who replaced the MTO voucher recipients at the outset of the experiment almost surely had them. Because MTO did not collect the relevant data, it is not possible at this stage to estimate the effects of the MTO reforms on the many additional families who received housing assistance in existing programs as a result of the MTO reforms.

**Alternative Reforms**

Although it is not possible to conduct a comprehensive analysis of the MTO reforms implemented, it is feasible to produce a broader analysis of the effects of two similar reforms that would have yielded almost the same outcomes for members of the experimental and Section 8 groups. The MTO results would be part of a comprehensive analysis of these reforms.

Unlike the MTO reforms, both alternative reforms are designed to serve the same number of families as the current system. They would have made the same offer to the same families living in the same housing projects. Other subsidized households, however, would not have filled the units vacated by families who used the offered voucher. Under the first alternative reform, households paying market rents would have occupied those units. The second reform would have demolished buildings in subsidized projects with a number of units equal to the number vacated by MTO voucher recipients plus a fraction of the vacant units in the projects involved, sold the land to the highest bidder, and reduced the public housing budget by the amount that would have been spent on these units with a continuation of the current system.

The public housing parcels sold under the second alternative would have been a subset of those that were redeveloped with HOPE VI grants and funding from other sources during the course of MTO. In essence, selling these parcels would be an alternative use of some, but not all, of the properties that were redeveloped during MTO. As mentioned previously, about 42 percent of public housing units involved in MTO were demolished and replaced with new housing before data collection for the final impacts evaluation. The MTO results suggest that if all public housing tenants living in projects in high-poverty neighborhoods had been offered traditional Section 8 vouchers, only 15 percent of the families would have used them—about 25 percent of eligible families enrolled in MTO and 61 percent of enrollees in the Section 8 group used the offered vouchers. Therefore, the number of units that would have been sold under the second alternative is much less than the number redeveloped during MTO.
Under the second alternative, the public housing properties would have been sold at the earliest reasonable time after the departure of families with vouchers. In almost all cases, this would have happened earlier than redevelopment occurred in the MTO projects. This alternative would have avoided expenditures on operating these units under the status quo until their redevelopment and generated the revenue from selling them sooner. It would also have avoided leaving vacant for long periods many additional units in public housing projects that would eventually be redeveloped. The accelerated demolition would almost surely have benefited some and harmed other residents of these housing projects. Because it affects only the timing of the demolition of their units, however, the magnitudes of these benefits and costs arguably would be modest.

Because so many units in the housing projects redeveloped under HOPE VI were not available for occupancy due to their failure to meet the program's minimum housing standards, it would have been possible to demolish buildings with many more units than the number of families that accepted MTO vouchers without reducing the number of assisted households. Popkin et al. (2004) reported that about one-third of the units in projects redeveloped under HOPE VI were vacant at the time of the grant award. Demolishing buildings with more units than the number occupied by voucher recipients and selling the land would have generated additional revenue to reduce the taxpayer cost of assisting the same number of families.

To continue to assist the same number of households over time under either alternative reform, something must be done to replace the initial voucher recipients who give up their vouchers. By the time of data collection for the final impacts evaluation, only 45 percent of households in the Section 8 group continued to receive vouchers. To offset attrition among the initial voucher recipients, the alternative reforms would have offered vouchers to households that moved into the same housing projects after the initial voucher recipients departed or who lived in housing projects in census tracts with only slightly lower poverty rates. Those households would have benefited and taxpayers would have incurred additional costs on their behalf. We could use the MTO data to estimate these magnitudes because the recipient benefits and taxpayer costs should be about the same as for initial voucher recipients with the same observed characteristics.

Both alternative reforms would have generated additional revenue to offset the cost of the vouchers. For the first alternative, the additional revenue would have come from the new public housing tenants who pay market rents. For the second, it would have come from selling public housing land. The second alternative also would have led to considerable cost savings. It would have avoided the cost of operating some public housing projects before their redevelopment and the considerable construction cost of HOPE VI redevelopment.² Indeed, as mentioned in the final impacts evaluation and discussed in more detail later in this article, the second alternative would almost certainly have generated cost savings and additional revenue exceeding the cost of the vouchers. In this case, the cost of providing the benefits to families who used vouchers would have been negative; that is, the reform would have provided greater benefits than the current system at a lower taxpayer cost.

² Turner et al. (2007) reported a construction cost of $160,400 per dwelling unit for the 192 HOPE VI projects initiated before 2004.
Applicability of the MTO Results to the Alternative Reforms

The alternative reforms might have had somewhat different effects on the studied outcomes than the MTO reforms. Because they would have affected the desirability of remaining in public housing to some extent, the alternative reforms would have affected treatment group members’ decisions about whether to remain in public housing and, hence, the MTO results would be less applicable. This section argues that these differences likely would have been very small.

Under the MTO reform, families from the top of the public housing waiting list initially occupied units vacated by families with MTO vouchers. Under the first alternative reform, they would have been rented at market rents, that is, to the households willing to pay the most for them. Therefore, the alternative reform would have led to a somewhat different set of neighbors for each subsidized family in public housing than the MTO reform. However, because the vacated units are in bad neighborhoods and usually in bad condition, the families willing to pay the most to live in them would surely have had very low incomes, like the families on public housing waiting lists. Furthermore, only 15 percent of the units would be rented at market rents. The differences in the characteristics of the families who would occupy public housing units under MTO and under the first alternative reform are likely to be modest. They would have little effect on families’ decisions about whether to use the offered voucher.

In deciding whether to use the MTO voucher, a farsighted eligible person would consider the future housing assistance that would be available later if he or she remained in public housing. This consideration, however, would not lead to different decisions under the alternative reforms compared with under MTO because the future options are about the same under all reforms. For example, many families offered vouchers under MTO lived in projects that were subsequently demolished, and their occupants were offered the option of a housing voucher or a vacant unit in another public housing project at that time. The same options would have been available under the first alternative reform. This reform assumes the same pattern of public housing redevelopment. Its only difference from the MTO reform is that enough occupants of public housing units pay market rents so that the voucher offer does not affect the total number of assisted households.

The MTO evidence is unambiguously applicable to a version of the second alternative reform that retains the same timing of the demolition of public housing projects as occurred under MTO. If the same projects would have been demolished at the same time under either reform, the effect on the occupants of these projects would have been essentially the same. Public housing tenants would have had the same options at each point in time. In this case, the MTO results should provide excellent estimates of the effects of the second reform on the families offered vouchers.

If the projects had been sold at the earliest feasible time after voucher lease up, occupants of the projects sold would have been offered the option of a housing voucher or a unit in another public housing project earlier than under MTO. MTO evidence would be somewhat less applicable to this reform because the accelerated demolition of public housing projects would make staying in public housing more attractive to some families in the two treatment groups and less attractive to others. For the reasons mentioned previously, however, these changes in the desirability of remaining in public housing are likely to be small, and the bias in the MTO estimates of effects on the individuals in families initially offered vouchers would be modest.
In short, the two alternative reforms should have about the same effects as the MTO reform on families living in public housing projects in high-poverty census tracts who are offered vouchers, so the MTO evidence applies to the effects of the alternative reforms on these families.

**Estimating the Costs to Taxpayers of the Alternative Reforms**

As explained previously, the MTO data could be used to estimate the taxpayer cost of the vouchers offered to households under the alternative reforms. This section addresses the estimation of the additional revenue and cost savings from the alternative reforms that would be available to offset the cost of these vouchers. Existing evidence on the relative cost-effectiveness of public housing and housing vouchers gives us good reason to expect that the former exceeds the latter for the second alternative reform. That is, the reform would have achieved benefits to voucher recipients at a lower taxpayer cost than the current system.

The first alternative reform would have charged market rents for the public housing units vacated by the families who accepted the initial voucher offer. Therefore, it would have generated additional revenue that could have been used to defray a part of the cost of the vouchers. The additional revenue is the difference between the market rents of the units vacated and the rents that the voucher recipients would have paid for them. MTO administrative data on voucher recipients could be used to estimate the latter. Market rents of the public housing units might be predicted in one of two ways. Since the early 2000s, PHAs have been required to estimate the market rents of their units to give their tenants a choice between a flat rent and an income-based rent. To the best of my knowledge, no one has ever studied the accuracy of these estimates. Nevertheless, they could be used for the years available, and the earliest available PHA estimate could be adjusted for real depreciation and inflation to produce estimates for earlier years. Alternatively, the data on MTO voucher units could be used to estimate a hedonic relationship between the rents paid to landlords and the characteristics of the dwelling units and their neighborhoods, and this estimated equation could be used to predict the market rents of public housing units. Previous research has indicated that the rents paid to landlords of voucher units are very close to the rents of unsubsidized units with the same characteristics (Leger and Kennedy, 1990; ORC Macro, 2001; Wallace et al., 1981; Weinberg, 1982).

The second alternative reform would have generated substantial cost savings and additional revenue compared with the MTO reform. The cost savings is the money that was spent to operate and redevelop the public housing projects that would have been sold under the second reform. Data on these magnitudes are or were in PHA records. However, some considerable assembly may be required, and it may be necessary to impute values for the early years because records have been discarded. Because the new public housing built under HOPE VI and other public housing redevelopment initiatives during the years of the MTO study will provide benefits beyond the time of data collection, the entire cost of this redevelopment should not be subtracted from the cost of the vouchers during this period. Applying an interest rate to the redevelopment cost yields a simple approximation of the cost savings in each year.\(^3\)

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\(^3\) Olsen (2009) suggests a more refined approach.
Selling the projects would have generated the additional revenue. Although many of the structures have little or no market value, the land often has great value. Many projects are located near the center of large metropolitan areas. Because of their proximity to employment, their land would often command a high price if only for its value in future development. Large parcels are particularly valuable. Many public housing sites are in or near gentrifying areas (Holin et al., 2003; Popkin et al., 2004). In gentrifying areas, the highest bidder for vacant land might be a developer of an upscale condominium complex to house people who work downtown and want to avoid lengthy commutes to their jobs. Or the highest bidder might be the developer of a retail store that would serve these people or the developer of an office building. Over time, business uses of land in central locations of metropolitan areas have squeezed out residential uses. In areas that are not currently experiencing gentrification, the highest bidder for vacant land might be an entity that will hold it for future use. In either type of area, the highest bidder might be the developer of a low-income housing tax credit project. The tax credit program provides a substantially higher subsidy to developers of projects in census tracts with poverty rates in excess of 25 percent. Estimation of the market value of the land could be based on the sales prices of nearby properties whose structures were demolished in order to convert the land to another use, and on the cost of demolishing the public housing project (Dye and McMillen, 2007; Weber et al., 2006).

Evidence on the performance of low-income housing programs suggests that the cost savings and additional revenue resulting from this reform would have been substantial. The best study that compares the cost-effectiveness of public housing with that of housing vouchers pertains to public housing projects built before 1975. More than 75 percent of public housing units had been completed by that time. The results imply that the excess total costs of public housing compared with those of housing vouchers for equally desirable housing in the two cities studied (Phoenix and Pittsburgh) were 64 and 91 percent, respectively, and the excess taxpayer costs were 97 and 150 percent, respectively (Mayo et al., 1980).

As with all the best cost-effectiveness analyses of housing programs, this study compared the total cost of providing the housing under each program, with estimates of their market rents based on detailed information about the characteristics of the units and their neighborhoods. For tenant-based vouchers and certificates, the approach is straightforward because all the costs associated with providing the housing during a period occur in that period and they are all in the records of the administering agency. Dealing with project-based assistance is more difficult because the time path of costs bears no particular relationship to the time path of the market rents of the units and all project-based assistance involves indirect costs that are not in the records of the administering agency. The ideal measure of cost-effectiveness for project-based housing assistance is the ratio of the present value of the rents paid by tenants and all direct and indirect costs incurred by federal, state, and local governments to the present value of the market rents of the units over the period that the units house subsidized families. If a government owns the project at the time that it stops housing subsidized families, the present value of the project’s market value at that time should be subtracted from the present value of the costs.

A U.S. General Accounting Office study based on a less complete accounting of the cost and much less information about the housing provided found that the HOPE VI public housing redevelopment program was the least cost effective of the active construction programs, with a 27-percent
excess total cost compared with the cost of housing vouchers (GAO, 2001). This estimate clearly understated the total cost of providing housing in the redeveloped projects because it omitted the opportunity cost of the land and the cost of preparing the site from the cost of HOPE VI projects.

**General Equilibrium Effects**

Because of the possibility of general equilibrium effects, Sanbonmatsu et al. (2011) were reluctant to claim that the results would apply to a national policy of offering vouchers to all families with children living in public housing projects in census tracts with poverty rates exceeding 40 percent. Some simple statistics suggest that these effects are likely to be minimal.

First, the results would surely have been very similar in the metropolitan areas involved had the experiment been expanded to all public housing in the metropolitan area rather than limited to public housing in the central cities of these areas. According to the U.S. Department of Housing and Urban Development’s (HUD’s) Picture of Subsidized Households (HUD, 2008), the central-city PHAs in these areas accounted for 88 percent of all public housing in their metropolitan areas. They surely accounted for an even higher fraction of all public housing units in census tracts with poverty rates exceeding 40 percent. Therefore, the MTO results already reflect any general equilibrium effects of the policy initiative to a considerable extent.

Second, the reforms affected a part of the market that was too small to have any significant general equilibrium effects. According to HUD (2008), about 1.07 million households are living in public housing units and 37 percent are female headed with children. Data on MTO families indicate that 97.8 percent of the demonstration’s families with children are female headed. Under the assumption that this rate holds true for all families in public housing, about 37.8 percent of all families in public housing have children. Newman and Schnare (1997) estimated that about 36.5 percent of households in public housing live in census tracts with poverty rates in excess of 40 percent. These numbers suggest that about 155,000 families with children live in public housing projects in these high-poverty neighborhoods. The MTO results suggest that 15 percent of these families would accept a traditional voucher to leave their public housing unit. Therefore, if the policy reform were limited to these families, about 23,000 of the 155,000 eligible households would use the offered vouchers.

This 23,000 figure, however, is an upper limit on the increase in net total demand for housing units in the private market. Under the MTO reform, households moved from the private market to public housing to replace the families who used the MTO vouchers. Thus, the net increase in total demand for units in the private market was about zero, albeit positive in the middle of the quality spectrum and negative for lower quality units. Voucher recipients tend to occupy rental units of about average quality, whereas families who enter public housing typically come from the worst units in the private market. The first alternative reform would have added as many units to the supply in the private market as to the demand (albeit not at each quality level) because the units MTO voucher recipients vacated would have been rented at market rents. They would have become a part of the unsubsidized supply. Only for the second alternative reform would the increase in net demand in the private market have been about 23,000 households. Under this reform, about 23,000 inhabitable public housing units would have been demolished.
This number of voucher recipients would easily be absorbed into the rental housing market with minimal effects on market rents or vacancy rates in any segment of the housing market. According to the American Community Survey, there were more than 44 million rental units and about 3.6 million vacant units available for rent in the U.S. in 2010. More than 220,000 of the vacant units had monthly contract rents in each $50 interval between $400 and $800, more than 350,000 units had asking rents between $800 and $899, more than 250,000 units had asking rents between $900 and $999, and more than 400,000 units had asking rents between $1,000 and $1,250 a month.

The evidence from the Experimental Housing Allowance Program leads to a similar conclusion. Its entitlement Housing Assistance Supply Experiment, which offered tenant-based housing assistance to the 15 to 20 percent of households with the lowest incomes in two metropolitan areas, had minimal effects on the market rents of units of any type (Lowry, 1983).

**Conclusion**

MTO provides evidence on the effects of two important reforms of low-income housing policy on a subset of the people affected by those reforms. At this stage, it is not feasible to estimate the effects of these reforms on many others, namely, the additional people who received housing assistance on account of MTO. This article argues that the MTO evidence is applicable to two similar reforms that, unlike MTO, would have no effect on the number of families who receive housing assistance but would instead affect the nature of the housing assistance offered and the taxpayer cost of providing it. Supplementing the MTO results with estimates of the taxpayer cost of the reforms would provide a reasonably comprehensive analysis of their effects. This article suggests how to estimate the taxpayer costs of the alternative reforms. Doing so would significantly increase the value of MTO research for housing policy development. Existing evidence gives good reason to expect that one of the reforms would achieve the benefits to public housing tenants who accept the offered vouchers at a lower taxpayer cost than the current system.

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