## FURMAN CENTER FOR REAL ESTATE & URBAN POLICY

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# The Impact of Subsidized Housing Investment on New York City's Neighborhoods

### WORKING PAPER 06-02

Furman Center for Real Estate and Urban Policy

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At a congressional hearing in 1948, representative A.S. Mike Monroney argued that the construction of new, subsidized housing improves the surrounding neighborhood, and in so doing, raises property tax revenues. He stated: "One of the principal arguments, with which I go along, is that the establishment of a housing project in a city raises the assessed valuation for blocks around it and puts back onto the municipal tax rolls a great deal more money than is taken off by the land that is occupied by these public housing projects."<sup>1</sup> Congressman Monroney was not alone in his beliefs; when the federal public housing program was first established in the late 1930s, neighborhood benefits were a key justification.

Yet it is hard to imagine a member of Congress making a similar argument today. The contemporary assumption is that the production of subsidized housing, if anything, accelerates neighborhood decline – "there goes the neighborhood" is the common refrain. And partially as a result, we've seen the policy pendulum swing away from place-based housing investment towards demand-side housing programs, such as housing vouchers.

Despite this policy shift, many of the local developers and nonprofits who build and manage subsidized housing continue to believe that their efforts not only provide shelter but revitalize communities as well, which raises the obvious question: Who is right? Responding to this question, researchers at NYU's Furman Center for Real Estate and Urban Policy decided to revisit the question of the neighborhood effects of

<sup>&</sup>lt;sup>1</sup>Fisher, Robert Moore, *Twenty Years of Public Housing*, New York: Harper & Brothers, 1959, p. 159.

subsidized housing. Specifically, with support from the MacArthur Foundation and other sources, we wrote a series of papers investigating whether and how the investments in rental housing made during the late 1980s and 1990s by the City of New York have affected the city's neighborhoods.<sup>2</sup> As will be explained in more detail below, we have consistently found significant, positive impacts, suggesting that publicly-funded housing investments aimed at distressed urban properties can deliver significant benefits to the surrounding community.

As discussed in the accompanying policy brief, between 1986 and roughly 2000, New York City engaged in a massive effort to rebuild its housing stock, funded with a mix of city, state, and federal dollars. Much of the effort was focused on the stock of housing that the city had acquired through tax foreclosure proceedings during the 1970s. During that decade, as a result of large population losses, rising maintenance costs and stagnant tenant incomes, entire neighborhoods in the city were devastated by waves of abandonment and arson. By 1979, New York City had taken ownership of over 60,000 units in vacant buildings and another 40,000 units in occupied buildings. Today, virtually all of these properties have been stabilized, rehabilitated, and turned over to private owners. In total, the city's programs have built or rehabilitated nearly 200,000 housing units in the city's most distressed neighborhoods.

<sup>&</sup>lt;sup>2</sup> See Ingrid Gould Ellen and Ioan Voicu, "Non-Profit Housing and Neighborhood Spillovers," *Journal of Policy Analysis and Management* 25(1), 2006: 31-52; Amy Ellen Schwartz, Ingrid Gould Ellen, Ioan Voicu, and Michael H. Schill, "The External Effects of Subsidized Housing," *Regional Science and Urban Economics*, forthcoming; Michael H. Schill, Ingrid Gould Ellen, Amy Ellen Schwartz, and Ioan Voicu, "Revitalizing Inner-City Neighborhoods: New York City's Ten Year Plan for Housing," *Housing Policy Debate* 13(3), 2002: 529-566; Ingrid Gould Ellen, Michael H. Schill, Amy Ellen Schwartz, and Scott Susin, "Building Homes, Reviving Neighborhoods: Spillovers from Subsidized Construction of Owner-Occupied Housing in New York City," *Journal of Housing Research* 12(2), 2002: 185–216, reprinted in Eric Belsky, ed., *Low-Income Homeownership: Examining the Unexamined Goal*, Washington DC: Brookings Institution Press, 2002.

City documents, as well as speeches made by Mayor Edward Koch, make clear that neighborhood revitalization was a central goal from the start. The aim of the city's ambitious housing program was to bring people back to the neighborhoods that had been so devastated during the 1970s, and to remove dangerous vacant buildings and vacant lots. Certainly, there are theoretical reasons to believe that improving blighted structures should help to catalyze neighborhood revitalization. Dilapidated, abandoned buildings are not only eyesores, but they are also unsafe and can serve as havens for drug activity. Moreover, the disorder they represent may signal that the community is disorganized and that criminal activity will go largely unchecked.<sup>3</sup> Thus the stabilization of these blighted structures and their transformation into stable, occupied housing units is critical. It can increase population, fuel commercial activity, reduce crime, re-energize schools, and encourage nearby owners to rehabilitate their properties.<sup>4</sup>

Actually identifying and quantifying the neighborhood spillover effects generated by housing investment is quite difficult. The first challenge lies in measuring any neighborhood improvements. Sources of data are hard to come by, and many of the outcomes we would wish to capture (e.g., social capital and collective efficacy) are difficult to quantify.<sup>5</sup> However, because land is immobile, to the extent that any of these outcomes occur, they should be capitalized into, or reflected in higher property values. Put simply, if a neighborhood becomes a better place to live, people will be willing to pay

<sup>&</sup>lt;sup>3</sup> See James Q. Wilson and George Kelling, "The Police and Neighborhood Safety: Broken Windows," *Atlantic Monthly* 127 (1982): 29-38. See also Wesley Skogan, *Disorder and Decline: Crime and the Spiral of Decay in American Cities*, Berkeley: University of California Press, 1990.

 <sup>&</sup>lt;sup>4</sup> See Amy Ellen Schwartz, Ingrid Gould Ellen, Ioan Voicu, and Michael H. Schill, "The External Effects of Place-Based Subsidized Housing," NYU Furman Center for Real Estate and Urban Policy, January 2005, available at www.law.nyu.edu/realestatecenter/publications/hsg\_extern\_paper\_ssrn\_rv7.pdf
<sup>5</sup> Collective efficacy is defined as the willingness of local residents to intervene for the common good. For more on the concept, see Robert J. Sampson, Stephen W. Raudenbush, and Felton Earls, "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy," *Science* 277 (August 1997).

more to live there. Thus, in our research, we measured neighborhood benefits by increases in the value of surrounding properties. In current work, we are exploring impacts on schools and in future work, we hope to investigate impacts on crime.

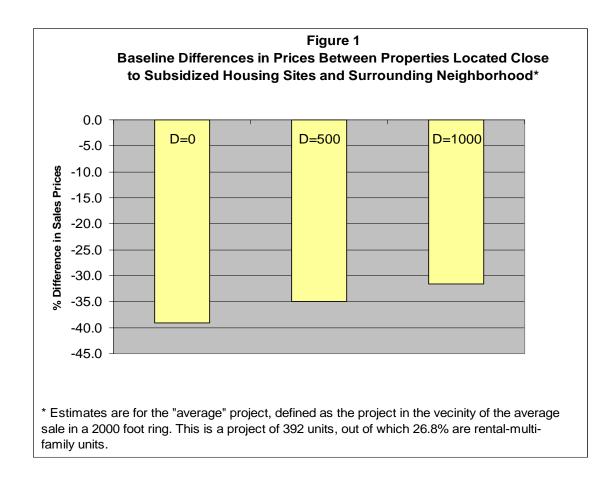
The second fundamental challenge in measuring neighborhood impacts is that we cannot know for sure what would have happened to property values in the absence of the housing investment. Different statistical models make different assumptions about this counterfactual. Intuitively, our basic approach was to assume that housing prices would have grown at the same rate as prices of similar properties that are in the very same neighborhood, but a further distance away from the investment. That said, we also experimented with several other assumptions to test for the robustness of our results.<sup>6</sup> We used a technique called hedonic regression analysis to control for the characteristics of transacting properties and to ensure that we were comparing the sales prices of similar properties.<sup>7</sup>

While the Furman Center's research has studied impacts citywide, we focus here on impacts in the Bronx, the borough in which the largest number of housing units were assisted. A few key results are worth highlighting. The first is that prior to rehabilitation, these city-assisted housing sites – which were typically vacant, abandoned properties that the city had taken over for tax foreclosure – appear to have significantly depressed the value of neighboring properties. Specifically, as shown in Figure 1, we found that for the typical Bronx project, properties located right next to the original, abandoned properties

<sup>&</sup>lt;sup>6</sup> See Amy Ellen Schwartz, Ingrid Gould Ellen, Ioan Voicu, and Michael H. Schill, "The External Effects of Place-Based Subsidized Housing," NYU Furman Center for Real Estate and Urban Policy, January 2005.

<sup>&</sup>lt;sup>7</sup> For more on hedonic regression analysis, see Denise DiPasquale and William Wheaton, *Urban Economics and Real Estate Markets*. Englewood Cliffs, NJ: Prentice Hall, 1996.

(distance = 0) sold for 39.1 percent less than comparable properties located further away but still in the same neighborhood. The reduction in price was typically larger for larger sites and as expected, it declined with distance from the site. Nonetheless, as the figure also shows, we still found significantly lower prices 1,000 feet away from assisted housing sites. Specifically, the prices of properties located 1,000 feet from assisted housing sites (distance = 1,000) were 31.6 percent lower than the prices of comparable properties selling at the exact same time in the surrounding neighborhood. We cannot say for sure that these blighted, city-owned sites fully explained the lower property values in the 1,000-foot rings surrounding them, but it is clear that they were a contributor.

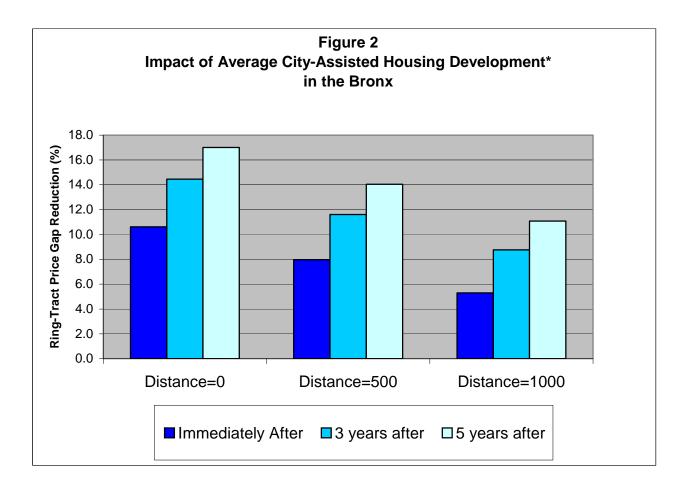


This figure suggests strongly that property abandonment can have grave effects on communities and may be extremely costly for local governments. Property tax revenues may decline not only as a result of the failure of the abandoned properties themselves to pay taxes, but also from reductions in the assessed value of neighboring buildings.

A second, and perhaps more critical, result is that New York City's investment in these abandoned, tax-foreclosed properties appears to have yielded significant, positive benefits. Figure 2 shows the extent to which the gap between prices of properties near assisted housing sites and those in the surrounding neighborhood fell after completion, or in other words, how much prices rose in the vicinity of the subsidized housing relative to other comparable properties in the same neighborhood. Immediately after completion, we found that prices of properties right next to city-assisted housing sites rose by 10.6 percentage points more than those in the surrounding neighborhood. Moreover, we found that these impacts grew over time, perhaps as families moved into the housing and the population rose. Five years after completion, properties next to the city-assisted housing had appreciated a full 17 percentage points more than other comparable properties in the neighborhood.

Impacts shrink with distance from the city-assisted housing, as one would expect, but the figure shows significant positive effects at 1,000 feet away from subsidized housing investment as well. Building more units appears to bring a greater benefit, though this marginal effect declines as the number of units increases.

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Our analyses suggest that these relationships are causal, i.e., that the investments that New York City made during the 1980s and 1990s to build new subsidized housing and rebuild dilapidated properties as affordable housing for members of the community have generated improvements in the surrounding neighborhoods. While there are plausible alternative explanations for these price patterns, the evidence does not support them. For example, although city officials may have wanted to pick "winning" sites where prices were going to appreciate anyway, even in the absence of investment, they had little latitude in their selection. By the end of our study period, virtually all available sites in New York City had been developed. Moreover, the results are robust to various different specifications and statistical techniques.

We also found that the magnitude of these neighborhood benefits was substantial. Our analysis of costs and benefits suggests that New York City's housing investments delivered a tax benefit to the city that exceeded the cost of the city's subsidies and amounted to some 75 percent of total public investment, which includes both state and federal dollars.<sup>8</sup> It is worth emphasizing that in these calculations we did not consider the benefits enjoyed by the households that actually reside in the new subsidized housing. Adding such individual benefits would yield even more favorable estimates.

#### Heterogeneity of Impacts

Our work also explored whether either the design of the program, initial neighborhood conditions, or the form of ownership mattered in shaping neighborhood impacts. We found few differences in program design. We saw no difference, for instance, between the neighborhood spillover effects of units created through the rehabilitation of vacant buildings versus in-fill, new construction projects, suggesting perhaps that the presence of an untended vacant lot can be as destructive to the surrounding community as a vacant, dilapidated building. And contrary to the conventional belief that lower density structures are better neighbors, structure type was surprisingly irrelevant in our models. The magnitude of the spillover effect was unchanged whether the subsidized housing was comprised of single-family homes, 2-4 unit buildings, or multifamily apartment buildings.

We did find that initial conditions in a neighborhood mattered, and the averagesized project appeared to have a greater impact in the more distressed neighborhoods.

<sup>&</sup>lt;sup>8</sup> For more detail on these tax benefit estimates, see Amy Ellen Schwartz, Ingrid Gould Ellen, Ioan Voicu, and Michael H. Schill, "The External Effects of Place-Based Subsidized Housing," NYU Furman Center for Real Estate and Urban Policy, January 2005.

Interestingly, however, small numbers of units had lesser effects in the most distressed or blighted neighborhoods, perhaps because building a few new housing units in a highly blighted area may simply not be enough to make a difference.

As for form of ownership, once we controlled for the fact that owner-occupied housing tended to be built in the less distressed communities, we found no statistically significant difference between the impacts of rental and ownership projects, contrary to the common belief that owner-occupied homes are better for communities than rental apartments.

Within rental housing, we did find some differences between the impacts of housing developed by nonprofit and for-profit organizations.<sup>9</sup> In particular, we found evidence that neighborhood spillover benefits were somewhat more sustained over time when rehabilitation projects were undertaken by nonprofit developers. This finding is consistent with theoretical predictions. In the presence of information asymmetries with respect to housing quality, together with the non-distribution constraint that prevents nonprofits from distributing profits to the people controlling the organization, nonprofits are likely to invest more in developing and maintaining features that benefit the broader community than their for-profit counterparts.

However, we also found that in the case of small projects, nonprofit organizations delivered significantly smaller neighborhood benefits than their for-profit counterparts. The fact that scale makes such a difference to nonprofit impacts may be explained by the capacity issues that often challenge smaller nonprofits, again rooted in the nondistribution constraint. It could also reflect the fact that smaller nonprofit projects

<sup>&</sup>lt;sup>9</sup> For more detail, see Ingrid Gould Ellen and Ioan Voicu, "Non-Profit Housing and Neighborhood Spillovers," *Journal of Policy Analysis and Management* 25(1): 31-52.

typically lack community amenities. At the very least, this finding suggests greater heterogeneity within the nonprofit sector and points to the continued importance of paying attention to capacity issues for nonprofits, especially those that are small operations.

#### Studies in Other Cities

Other research on the neighborhood impacts of subsidized housing has not found similarly strong results.<sup>10</sup> There are several possible explanations for the difference. The first is methodological. Few other studies have had access to the same kind of geo-coded, longitudinal data that we did, and thus we were able to more effectively sort out causality. Several of these other studies, for instance, find that property values tend to be lower near subsidized housing sites. But these studies cannot sort out whether this is because the development of subsidized housing actually caused the lower housing values or because the subsidized housing was simply located in a more distressed area to begin with. The methodology permitted by our data can more persuasively distinguish between

<sup>&</sup>lt;sup>10</sup> See e.g., Briggs, Xavier de Souza, Joe T. Darden, and Angela Aidala, "In the Wake of Desegregation: Early Impacts of Scattered-Site Public Housing on Neighborhoods in Yonkers, New York," *Journal of the American Planning Association*. 65(1999):27-49; Cummings, Jean L., Denise DiPasquale and Matthew E. Kahn, "Measuring the Consequences of Promoting Inner City Homeownership," *Journal of Housing Economics 11 (2002): 330-359;* Goetz, Edward, Hin Kin Lam, and Anne Heitlinger, "There Goes the Neighborhood? The Impact of Subsidized Multi-Family Housing on Urban Neighborhoods." Minneapolis: Center for Urban and Regional Affairs Working Paper 96-1, 1996; Lee, Chang-Moo, Dennis P. Culhane, and Susan M. Wachter, "The Differential Impacts of Federally Assisted Housing Programs on Nearby Property Values: A Philadelphia Case Study," *Housing Policy Debate*. 10(1999):75-93; Lyons, Robert F. and Scott Loveridge, "An Hedonic Estimation of the Effect of Federally Subsidized Housing on Nearby Residential Property Values," Staff Paper P93-6, St. Paul, MN: Department of Agriculture and Applied Economics, University of Minnesota, 1993; Santiago, Anna M., George C. Galster, and Peter Tatian, "Assessing the Property Value Impacts of the Dispersed Housing Subsidy Program in Denver," *Journal of Policy Analysis and Management*. 20(2001): 65-88.

these two phenomena.

Moreover, the fact that our analyses were based on a data set including information on an extraordinarily large number of transactions and an enormous number of units gave us power in estimating impacts. Earlier studies have typically examined the impact of several hundred subsidized units, spread across a number of projects. By contrast, we examined the effect of approximately 66,000 new subsidized units, developed at different times over several years, in a wide range of neighborhoods. Thus, it is harder to believe that an unexplained contemporaneous phenomenon was responsible for lifting property values in the proximity of the city-assisted units, while leaving properties outside the ring but in the same neighborhood unaffected. One would have to believe that this phenomenon occurred at different times in different neighborhoods simultaneously to the housing investment.

Of course, it is possible that the impact of the housing investments made in New York City may simply have been different than the impact of those made in other cities – differences rooted either in the particular context of New York City or in the particular strategies employed here. Some of these differences may be explained by the unique features of New York City's ambitious housing program. New York's housing programs differed in several ways from the federal housing initiatives that are typically examined in other studies. First, New York's programs placed a greater emphasis on mixing incomes within projects. Rather than concentrating the very poorest households in particular neighborhoods or projects, the City generally aimed to create housing with a mix of incomes.

Second and perhaps more importantly, New York City more explicitly focused on

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neighborhood revitalization. In the programs evaluated in these other cities, the focus on neighborhoods was far less central. Further, New York City focused on rehabilitation and chose sites (either buildings or vacant land) that were extremely blighted. Modest improvements to these blighted properties thus may have generated dramatic improvements in the blocks surrounding them. Many of the efforts examined by other researchers did not explicitly target pockets of abandonment. Indeed, in several of the cities examined (e.g., Denver and Yonkers), the aim was to select sites in middle-class neighborhoods.

The features mentioned so far – the focus on income mixing and neighborhood revitalization – could potentially be transplanted to other cities and to other programs. But another possibility is simply that, as we hear all the time, New York City is simply different. For instance, it may be that the low vacancy rates in New York City permitted greater spillovers. In cities like Philadelphia in the 1990's, with shrinking population and high vacancy rates, an infusion of new housing was probably not what its distressed neighborhoods needed. In the context of a weak market, additional housing can potentially trigger the removal of buildings from the housing stock. In New York City, by contrast, the population was growing during the 1990s, and structural barriers inhibited the construction of affordable, private housing. In the context of the city's perennially low vacancy rates, public sector subsidies for housing production and rehabilitation was likely a more effective spur to neighborhood economic development. New York's extraordinarily high density may also play a role, for we would expect spillover effects to be larger in neighborhoods with higher densities. Finally, it is also hard to imagine other cities replicating New York's efforts at the same tremendous scale.

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In summary, the Furman Center's estimates show that publicly-funded housing investments targeted strategically at distressed urban properties can deliver significant neighborhood benefits. Thus, cities may be able to use housing subsidies to serve two purposes – to create new, affordable housing units for qualified recipients and to revitalize urban neighborhoods. Further, the rise in property values in the vicinity of the new housing suggests that a city may to some extent recoup the investments that it makes in housing through an increase in property tax revenues.