Opting In, Opting Out: A Decade Later

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Abstract

This article updates the U.S. Department of Housing and Urban Development (HUD) report Multifamily Properties: Opting In, Opting Out and Remaining Affordable *(Finkel et al., 2006). The original report examined the loss of affordable housing associated with HUD's Section 8 project-based rental assistance and Section 236 and 221(d)(3) subsidized mortgage programs between 1998 and 2004. It found that properties with low rents compared to the surrounding Fair Market Rent (FMR), that serve a family population, and that are owned by for-profit corporations were particularly at risk for loss of affordability.*

The analysis is updated here for the period 2005 to 2014. It shows that more owners made active decisions to opt in to Section 8 assistance in the latter period, while HUD's older subsidized mortgage programs were largely being phased out. Factors such as for-profit ownership and low rent-to-FMR ratios continued to be associated with higher risk of loss of affordability, but these factors were less influential from 2005 to 2014 than in the original study.

The article also explores the use of the Low-Income Housing Tax Credit Program and HUD refinancing to preserve affordability in Section 8 developments. The analysis finds that these preservation tools are associated with extended affordability for thousands of HUD-assisted properties. Additional preservation initiatives and improved targeting may be needed to preserve other HUD-assisted properties, particularly smaller developments in strong real estate markets.

Introduction

U.S. Department of Housing and Urban Development (HUD) multifamily programs are a critical source of affordable housing. As of 2016, these programs provided over 1.4 million assisted housing units: privately owned rental units whose owners receive subsidized mortgages, rent subsidies, or both in exchange for making these units affordable to low-income households through tenant income and rent restrictions. Affordable housing options provided by these programs serve a particularly vulnerable population. Three-fourths of developments funded through HUD's multifamily programs serve extremely low-income households (under 30 percent of area median income). More than one-half serve elderly households (HUD, 2016).

The affordability of the assisted housing stock faces risk from two directions. First, tenant income and rent restrictions placed on properties are time-limited. When restrictions expire, owners of developments in strong real estate markets can opt out of subsidy programs and convert properties to market-rate rental units, condominiums, or other uses. Second, the HUD-assisted housing stock dates to the 1960s through 1980s. Many aging properties are at risk of loss because of foreclosure or abatement of rental assistance contracts due to poor physical conditions.

Pinpointing the properties that are most at risk of loss enables affordable housing developers, advocates, and funders to intervene early to preserve affordability and allow these properties to continue to serve low-income households. Preservation of assisted properties usually calls for new subsidized financing to rehabilitate aging facilities and extend affordability requirements. It often also includes transferring properties to owners whose mission is to provide affordable housing to low-income tenants over the long term.

Original Study

To help the affordable housing community develop early warning systems for at-risk properties, in 2006 HUD published *Multifamily Properties: Opting In, Opting Out and Remaining Affordable* (Finkel et al., 2006). The study assessed the loss of HUD-assisted multifamily units over the 1998-to-2004 period. The study included properties subsidized by HUD's 1960s- to 1970s-era Section 221(d)(3) and Section 236 programs, which provided low-interest mortgages to housing owners, and HUD's 1970s- to 1980s-era project-based Section 8 program, through which HUD offered ongoing assistance to subsidize rents of low-income tenants. In all, the study covered 22,471 rental developments across the country (Finkel et al., 2006).

The 1998-to-2004 period was a risky time for the HUD-assisted inventory because developments funded in the 1960s and 1970s had passed the 20-year mark. Although subsidized mortgages typically carried a 40-year term, most were eligible for prepayment after the first 20 years. If an owner prepaid a mortgage, rent and income restrictions on the property were extinguished. Similarly, owners could choose not to renew Section 8 rental assistance contracts after their initial term expired, also usually 20 years. This would also end income and rent restrictions.

Finkel et al. (2006) tracked losses to the affordable housing inventory from prepayments, contract opt-outs, foreclosures, and contract abatements due to poor conditions. It found that 4,100 properties with 303,638 affordable units were lost between 1998 and 2004, amounting to 19 percent of the inventory. At the same time, owners of 11,126 properties with 785,143 units made active decisions to renew rental assistance contracts (Finkel et al., 2006). Most of the rest of the properties did not require active decisions during the study period, such as developments whose Section 8 contracts were not due to expire until after 2004.

The authors used descriptive cross-tabulations and multivariate analysis to identify the property characteristics associated with heightened risk of loss of affordability. The analysis identified the following characteristics associated with higher risk of property loss: smaller properties, low rents compared to the surrounding Fair Market Rent (FMR), funding from HUD's early assistance programs, family occupancy, and for-profit ownership. Conversely, properties with nonprofit ownership, higher rents compared to the surrounding FMR, and elderly and disabled occupancy type were at lower risk of loss (Finkel et al., 2006).

Updated Analysis

This study replicates the Finkel et al. (2006) analysis for a new time period, 2005 to 2014. It addresses two research questions—

1. Do basic characteristics such as location, ownership, physical attributes, and neighborhood characteristics explain differences in the prevalence of opt-outs/prepayments and opt-ins?
2. How have the patterns and trends in opt-outs and prepayments changed since the initial study took place?

To answer these questions, we assessed the status of over 18,000 properties that remained in HUD's multifamily portfolio following Finkel et al. (2006). A baseline dataset of these properties from 2005 was compared to the 2014 inventory to determine whether properties have continued to operate as affordable housing. As in the original study, properties that exited the affordable inventory were classified based on whether they exited through an owner's choice not to renew Section 8 contracts (*opt-out*), prepayment or maturing of subsidized mortgages, HUD foreclosure and contract abatement actions, or a combination of these. For properties that continued to operate in the assisted inventory, we determined whether the owner made an active choice during the study period to renew assistance (*opt-in*).

This article begins with a discussion of the data and methods used to classify the properties into opt-in, opt-out/prepay, and foreclosure/abatement outcome categories and to update the quantitative analyses. Next, the article provides the results of the cross-tabulations of outcomes by property characteristics and the multivariate analysis of the effects of selected characteristics on the owners' opt-in/opt-out decisions.

Finally, we present additional analysis exploring preservation interventions among properties with an active Section 8 opt-in. The infrastructure for preserving at-risk assisted housing emerged during the 1990s and continued to mature during the study periods for both Opting In, Opting Out analyses. This article takes a first step toward tracking the effects of these initiatives by identifying properties with financial transactions potentially related to preservation, including Low-Income Housing Tax Credit Program (LIHTC) allocations, HUD's Mark-to-Market process, and HUD-insured refinancing. The article also examines the extent to which preservation tools have been targeted toward properties that are particularly at risk of opt-out.

Data and Methods

The new analysis mirrors the 2006 study's methods and data sources for classifying properties by opt-in/opt-out/foreclosure-abatement status, cross-tabulating property characteristics with subsidy outcomes, and multivariate analysis of the opt-in/opt-out decision.

Active properties from 2005 were included if they had funding from at least one of these HUD programs, classified as "older" or "newer" assistance programs in the original study (Finkel et al., 2006)—

- Older (1960s to 1970s): Rent Supplement (Rent Supp), Rental Assistance Payment (RAP), and Loan Management Set-Aside (LMSA) rental assistance programs; Section 221(d)(3) Below Market Interest Rate (BMIR) and Section 236 Mortgage Assistance Program subsidized mortgages.
- Newer (1970s to 1980s): Section 8 New Construction/Substantial Rehabilitation (NC/SR) and Section 8 Moderate Rehabilitation (Mod Rehab).[1]

For brevity, all the types of rental assistance listed previously, including the older Rent Supp and RAP programs, are hereafter referred to as "Section 8." The mortgage programs hereafter are referred to together as "236/BMIR."

Classifying Properties by Outcomes

HUD provided point-in-time property-level datasets for 2005 and 2014, listing all developments with active subsidies from Section 8, 236/BMIR, or both. The study universe was made up of properties in the HUD inventory in 2005: 18,107 developments with 1.49 million housing units. We compared the two datasets to determine whether each property continued as subsidized housing (*stayers*) or left the subsidized inventory between 2005 and 2014 (*leavers*). Properties were placed in four categories based on their reasons for staying or leaving the subsidized housing inventory—

1. *Opt-in* refers to stayers where the owner actively renewed a Section 8 contract during the study period. Most of these properties had no 236/BMIR mortgage. Some had mortgages that were still active or had matured by 2014.
2. *Opt-out* refers to leavers with a Section 8 opt-out, 236/BMIR prepayment or both. Properties with both types of assistance were included if the owner actively terminated both subsidies or if the property had a Section 8 opt-out and a maturing mortgage.
3. *Foreclosure/abatement* refers to leavers where HUD abated a Section 8 contract due to property conditions, foreclosed on a 236/BMIR mortgage, or both. A small number of stayers that were still undergoing the contract abatement process in 2014 were also included.

[1] The original study noted that, "(t)he Office of Public and Indian Housing manages most projects assisted with Section 8 moderate rehabilitation. These projects are not included in the Real Estate Management System (REMS) or a comparable database. The REMS database only includes the subset of such projects that are also associated with the Section 8 Property Disposition program. Consequently, our analysis of the Section 8 Moderate Rehabilitation projects in this study is limited to this part of the stock" (Finkel et al., 2006: 3). The same constraint applies to the updated version.

4. The *Other* category covers both stayers and leavers without a clear opt-in, opt-out or foreclosure and abatement action. Most were stayers where the owner did not have to make a Section 8 renewal choice because the Section 8 contract term continued through the entire 2005-to-2014 period. It also includes stayers where the owner made a mixed decision to continue one type of assistance but not the other. Most notably, owners of hundreds of properties prepaid 236/BMIR mortgages from 2005 through 2014 but continued to have active Section 8 assistance. The category also includes a small number of leavers where 236/BMIR mortgages were terminated for reasons other than prepayment, maturity or foreclosure.

Property Characteristics for Descriptive Cross-Tabulations

As in the original study, properties in the four outcome categories were cross-tabulated with a series of property, financing, owner, location, and tenant characteristics. Exhibit 1 shows the data sources for each characteristic. Unless otherwise noted, properties were classified based on their characteristics during the 2005 baseline year.

Exhibit 1

Data Sources for Property Characteristics

Variables	Data Source
Property geocoding (census tract, MSA, census division, metropolitan location)	Generated from HUD iREMS
Property characteristics (size, occupancy type, building type, percent assisted, building age based on occupancy date, REAC score)	2005 active properties, multifamily building type (generated from HUD iREMS)
Units by number of bedrooms	2005 active properties
HUD program type: older assisted versus newer assisted	2005 active properties
Detailed financing information (financed by FHA insurance, Section 202, Section 811, USDA Section 515, state HFAs)	HUD 2005 and 2014 active properties, active financing, active contracts, and multifamily building type files, iREMS; terminated contracts database; terminated multifamily mortgages database
Ownership type	2005 active participants database (generated from HUD iREMS)
Neighborhood characteristics (median household income, median gross rent, median value of owner-occupied housing, homeownership rate, poverty rate, homeowner and renter vacancy rate, racial/ethnic composition)	U.S. Census Bureau, 2005–2009 American Community Survey. Summary files constructed by Minnesota Population Center. National Historical Geographic Information System: Version 2.0.
Home sales market (change in Housing Price Index)	Federal Housing Finance Agency Housing Price Index
Rental market (change in HUD FMR)	HUD annual FMR datasets, 2005–2014
Tenant characteristics (length of residence, household size, percent minority headed, percent elderly, percent with children, household income as percentage of AMI)	HUD Picture of Subsidized Households, 2005

AMI = Area Median Income. FHA = Federal Housing Administration. FMR = Fair Market Rent. HFA = housing finance agency. HUD = U.S. Department of Housing and Urban Development. iREMS = Integrated Real Estate Management System. MSA = metropolitan statistical area. REAC = Real Estate Assessment Center. USDA = U.S. Department of Agriculture.

Multivariate Analysis

Both studies include a logistic regression model to isolate the effects of property, financing, and location characteristics on owners' decisions to opt into or out of Section 8 assistance. As noted in the original report (Finkel et al., 2006), multivariate analysis adds depth to the initial findings of the descriptive statistics. The model isolates the influence of each variable on the opt-in/opt-out decision. The apparent relationships between some variables and property outcomes in the descriptive cross-tabulations may drop out when the other factors are controlled.

The original analysis included the Section 8 only properties where the owner had to make an explicit decision to renew or opt out of a contract from 1998 to 2004. The new version widens this universe slightly by adding the small group of Section 8 and 236/BMIR properties where the owner made at least one opt-in/opt-out choice during the 2005-to-2014 study period. Properties were excluded if they did not have Section 8 assistance, if their Section 8 contracts did not come up for renewal between 2005 and 2014, or if data were insufficient to evaluate all variables. In all, the multivariate analysis covers 10,023 properties.

Results

In this section, we report the results of the classification of properties by HUD funding program and outcome, the descriptive cross-tabulations, and the multivariate analysis. We find that many of the same factors associated with the loss of affordable properties from the earlier study period continued to apply but that these patterns were less pronounced in the 2005-to-2014 period.

Stayers and Leavers

The analysis shows that property losses had slowed considerably since the Finkel et al. (2006) study period. Only 8 percent of properties were lost from 2005 to 2014, compared to 19 percent of properties in the original study. Exhibit 2 shows the change in the number of properties with each combination of Section 8 and 236/BMIR subsidy. Exhibit 3 shows the breakdown of properties by the four outcome categories: opt-in, opt-out/prepay, foreclosure/abatement, and the miscellaneous Other category.

Exhibit 2

Property Inventory Changes by Subsidy Type, 2005–2014

Subsidy Type	Remained in 2014 Inventory		Left Inventory by 2014		Leavers as Percent of Subsidy Type, Finkel et al. (2006)
	Number	Percent of Subsidy Type	Number	Percent of Subsidy Type	
Section 8 only	14,543	95	737	5	9
236/BMIR only	79	15	443	85	82
Section 8 and 236/BMIR	2,033	88	272	12	32
Total	16,655	92	1,452	8	19

236/BMIR = Section 236 Mortgage Assistance Program and Section 221(d)(3) Below Market Interest Rate Program.
Sources: U.S. Department of Housing and Urban Development, 2005 and 2014 active properties and active financing files, Integrated Real Estate Management System; Finkel et al. (2006)

Exhibit 3

Properties by Summary Outcome Categories, 2005–2014

	Opt-Ins	Opt-Outs/ Prepays	Foreclosure/ Abatement	Other	Total
Number of properties	12,786	748	293	4,280	18,107
Percent of properties	71	4	2	24	100

Sources: U.S. Department of Housing and Urban Development, 2005 and 2014 active properties, active financing, and active contracts files, Integrated Real Estate Management System; terminated contracts database; terminated multifamily mortgages database

- **Section 8 only.** In the original report, the most common outcome (68 percent of cases) was continued affordability in a Section 8 only property, either through an opt-in contract renewal or a *no choice* continuation of an existing contract. This pattern was even stronger in the new analysis; 80 percent of the study dataset was made up of Section 8 only properties where either the owner renewed a contract between 2005 and 2014 or the contract extended throughout the entire period. Fewer than 4 percent of the Section 8 only properties left the inventory during the study period. Most did so through owner opt-outs, with a smaller number of HUD-abated contracts.
- **Section 236/BMIR only.** Within the small stock of 236/BMIR properties without Section 8 that remained in 2005, most left the subsidized inventory through mortgage maturity, prepayment, or another termination reason by 2014.
- **Section 8 and 236/BMIR.** For properties with both types of assistance, the most common outcome was a Section 8 opt-in combined with an end to the 236/BMIR mortgage through prepayment, maturity, or other termination reasons. Surprisingly, Section 8 opt-outs upon mortgage termination did not appear to be a threat to the inventory. Owners of properties with prepaid or maturing mortgages opted out of Section 8 assistance in only 112 cases, comprising 9 percent of Section 8 properties with prepaid or maturing mortgages.

Overall, the 2005-to-2014 analysis reflects two trends: the continuation of most Section 8 assistance and the winding down of subsidized mortgage programs.

Descriptive Cross-Tabulations

Exhibit 4 shows the cross-tabulations of properties in the four subsidy outcome categories by property, tenant, financing, and location characteristics.[2]

The original report emphasized the loss of affordability in properties with family occupancy type, low rent-to-FMR ratios, and for-profit ownership. These patterns were also present in the 2005-to-2014 cross-tabulations.

First, housing for families was particularly at risk. Properties with family occupancy type made up 75 percent of opt-outs and 70 percent of foreclosure/abatements, even though they only made up 48 percent of the total property inventory. Single-parent households with children were

[2] Ray et al. (2015) included a more extensive discussion of the rules for classifying properties by outcome, a table showing properties by detailed combinations of Section 8 and 236/BMIR outcomes, and a more detailed discussion of the descriptive cross-tabulation results.

Exhibit 4

Property, Financing, Location, and Tenant Characteristics by Outcome (1 of 3)

	Opt-Ins	Opt-Outs/ Prepays	Foreclosure/ Abatement	All Other	Total
Property characteristics					
Number of properties	12,786	748	293	4,280	18,107
Percent of properties	71	4	2	24	100
Development size					
1–49 (%)	44	46	51	28	40
50–99 (%)	27	23	22	32	28
100–199 (%)	23	22	18	30	25
200 or more (%)	6	8	9	10	7
Average number of units	77	79	81	98	82
Unit size					
0 bedrooms (%)	7	5	4	5	7
1 bedrooms (%)	55	37	29	46	52
2 bedrooms (%)	25	43	43	31	27
3 bedrooms (%)	11	14	20	15	12
4+ bedrooms (%)	2	1	3	2	2
Average number of bedrooms	1.6	1.8	2	1.7	1.6
Occupancy type (%)					
Elderly/disabled	59	25	30	38	52
Family	41	75	70	62	48
Building type (%)					
Rowhouse	10	6	8	8	9
Townhouse	3	5	2	4	3
Semidetached	5	3	3	4	5
Detached	5	4	7	1	4
Walkup/garden	36	56	55	37	37
Midrise	3	1	2	3	3
Mixed	12	13	15	18	14
Highrise/elevator	28	11	9	25	26
Categories of rent-to-FMR ratio (%)					
Below 80%	11	28	21	16	13
80–100%	24	37	41	30	26
101–120%	27	20	22	30	27
121–130%	11	6	5	8	10
131–40%	8	3	5	6	7
141–160%	10	4	2	6	9
Over 160%	9	3	3	4	7
Building-age categories (%)					
Before 1975	17	38	33	30	21
1975–1979	20	19	21	30	22
1980–1985	46	35	31	37	43
After 1985	17	8	15	3	13
Ownership type[a] (%)					
Nonprofit	49	25	36	26	43
For profit	33	40	32	39	35
Limited dividend	15	27	28	30	19
Other	2	8	4	4	3
REAC Physical Inspection Score (1–100)					
Median	91	88	79	89	90
1–59 (%)	2	5	24	4	3
60–69 (%)	6	9	12	6	6
70–89 (%)	36	42	36	41	37
90–100 (%)	56	44	28	50	54

Exhibit 4

Property, Financing, Location, and Tenant Characteristics by Outcome (2 of 3)

	Opt-Ins	Opt-Outs/ Prepays	Foreclosure/ Abatement	All Other	Total
Financing characteristics					
Newer (Section 8 NC/SR, Mod Rehab) (%)	80	57	55	58	73
Older (Rent Supp/RAP, LMSA, 236/BMIR) (%)	20	43	45	42	27
Detailed HUD program type (%)					
Sec. 8 NC/SR	25	25	16	25	25
Sec. 202	29	4	15	3	21
Sec. 8/LMSA	19	25	41	25	21
Sec. 8/515	10	7	8	2	8
Sec. 8/HFDA	12	11	7	27	15
Sec. 8/Preservation	2	3	1	2	2
Sec. 8/PD	3	10	9	1	3
Rent Supp/RAP	1	0	0	6	2
No Rental Subsidy	0	16	4	9	3
Average percentage of assisted units	94	60	82	83	90
Primary form of financing (%)					
FHA insured	27	39	23	51	33
Section 202/811	27	4	12	2	20
Section 515	10	7	8	2	8
All other	36	51	57	45	39
HFA-related properties					
Number of HFA-related properties	1,553	82	21	1,140	2,796
Percent of HFA-related properties	56	3	1	41	100
FHA insured (%)	24	21	19	24	24
Noninsured (%)	76	79	81	76	76
Location and market characteristics					
Census division (%)					
New England	10	4	3	14	10
Mid Atlantic	13	10	9	15	13
East North Central	18	12	20	20	18
West North Central	11	19	16	11	11
South Atlantic	16	16	22	14	15
East South Central	7	6	8	9	8
West South Central	7	10	15	6	7
Mountain	5	7	3	5	5
Pacific	13	16	4	8	12
Metropolitan location (%)					
Suburb	31	28	22	33	31
Principal city	51	60	61	53	52
Nonmetropolitan	18	12	18	15	17
Neighborhood characteristics (averages for census tracts surrounding properties)					
Median household income ($)	39,831	41,937	35,371	38,363	39,498
Median gross rent ($)	693	741	652	675	690
Median value of owner-occupied housing ($)	197,022	200,939	146,169	191,037	194,958
Homeownership rate (%)	52	51	51	50	52

Exhibit 4

Property, Financing, Location, and Tenant Characteristics by Outcome (3 of 3)

	Opt-Ins	Opt-Outs/ Prepays	Foreclosure/ Abatement	All Other	Total
Poverty rate (%)	22	20	26	23	22
Homeowner vacancy rate (%)	3	3	4	4	3
Renter vacancy rate (%)	7	8	10	8	8
Racial/ethnic composition (%)					
White	60	59	48	58	59
African American	19	19	36	22	20
Hispanic	15	15	11	14	15
Asian	3	3	2	3	3
Other	3	3	3	3	3
Minority	40	41	52	42	41
Regional housing market (averages for MSAs or non-MSA state values surrounding property)					
Home sales market					
Average percent change in HPI, full study period (2005 Q1–2014 Q1)	3	6	5	1	3
Average percent change in HPI, strong market period (2005 Q1–2007 Q1)	14	16	14	12	14
Average percent change in HPI, weak market period (2007 Q1–2012 Q1)	– 13	– 14	– 11	– 13	– 13
Average percent change in HPI, recovering market period (2012 Q1–2014 Q1)	6	8	4	6	6
Rental market					
Average percent change in FMR, 2005–2014	27	27	29	26	27
Average tenant characteristics					
Length of residence (years)	5.9	5.9	5.2	5.8	5.9
Household size (people)	1.6	1.9	2.1	1.9	1.7
Percent minority headed	40	46	66	45	41
Percent of all persons with disability	22	17	17	16	20
Percent elderly headed	49	30	20	39	46
Percent with 2+ adults and children	5	9	8	8	6
Percent with 1 adult and children	20	30	41	28	22
Household income as a percentage of AMI	23	22	17	22	22

236/BMIR = Section 236 Mortgage Assistance Program and Section 221(d)(3) Below Market Interest Rate Program. AMI = Area Median Income. FHA = Federal Housing Administration. FMR = Fair Market Rent. HFA = housing finance agency. HFDA = Housing Finance and Development Agency. HPI = Housing Price Index. LMSA = Loan Management Set-Aside program. Mod Rehab = Section 8 Moderate Rehabilitation program. MSA = metropolitan statistical area. NC/SR = New Construction/Substantial Rehabilitation program. PD = Property Disposition. Q1 = first quarter. RAP = Rental Assistance Payment program. REAC = Real Estate Assessment Center. Rent Supp = Rent Supplement program.

[a] Ownership type was missing for 15 percent of properties. Percentages refer to set of properties for which owner type was known.

Sources: U.S. Department of Housing and Urban Development, 2005 and 2014 active properties, active financing, active contracts, and multifamily building type files, Integrated Real Estate Management System; terminated contracts database; terminated multifamily mortgages database; 2005 and 2014 FMRs; U.S. Census Bureau, 2005–2009 American Community Survey; Federal Housing Finance Agency HPI; 2005 Picture of Subsidized Households disproportionately present in the opt-out category and, in particular, foreclosure/abatement properties. Conversely, properties with elderly or disabled occupancy type made up over half of total properties, but only 25 to 30 percent of opt-outs and foreclosure/abatement properties.

Second, properties with rents below those of the regional market continued to be overrepresented among opt-outs. This is represented by the rent-FMR ratio. The numerator of this ratio is the rent that the property owner receives each month from HUD and the tenant; the denominator is the HUD FMR for the surrounding metropolitan area or county. Owners receiving below-market rents have a greater incentive to opt out, because they are more likely to be able to command higher rents from unsubsidized tenants. Only 13 percent of all properties in the study had rent-FMR ratios below 80 percent, but they represented 28 percent of all opt-outs. Properties with rents at 80 to 100 percent of FMR made up 26 percent of the total inventory but 37 percent of opt-outs.

Properties owned by for-profit and limited dividend corporations continued to be at higher risk of opt-out. Nevertheless, the 2005-to-2014 analysis shows some shift in opt-outs to nonprofits. Nonprofit owned properties made up 25 percent of opt-outs in the 2005-to-2014 study, compared to only 9 percent in the earlier study.

Unsurprisingly, properties in neighborhoods with stronger markets were more prone to opt-outs, whereas those in weaker markets were more prone to foreclosure/abatement. Among opt-out properties, census tract-level median household income, median rent, and home values were higher, but the poverty rate was lower. For the foreclosure/abatement properties, these patterns were reversed. Also unsurprisingly, foreclosures and abatements were more common among the oldest properties (pre-1975) and those with failing physical inspection scores from HUD's Real Estate Assessment Center (REAC).

In summary, the descriptive analysis showed that fewer properties left the assisted housing inventory from 2005 to 2014 compared to the original 1998-to-2004 study period. To the extent they did occur, opt-outs continued to disproportionately affect developments with rents below the regional FMR and in strong neighborhood markets. Opt-outs were also more common in properties with for-profit or limited dividend owners, although nonprofit-owned properties made up a larger share of opt-outs than in the original study. For their part, properties in weak neighborhood markets and with failing physical inspection scores were disproportionately affected by foreclosures and contract abatements. Finally, family-occupied properties continued to face higher risk from both opt-outs and foreclosures/abatements than developments with elderly and disabled occupancy.

Multivariate Analysis

The second type of quantitative analysis in the original study was a logistic regression model to isolate the effects of property, financing, and location characteristics on owners' decisions to opt into or out of Section 8 assistance. The independent variables were potential opt-out risk factors; the dependent variable was the decision to opt out of a Section 8 contract during the study period.

In the earlier study, the multivariate analysis identified these variables as key factors that increased opt-out risk: rent-FMR ratio below 80 percent, properties with all units receiving Section 8 assistance, for-profit/limited dividend ownership, family occupancy, property size below 50 units, and concentrations of units with fewer than three bedrooms (Finkel et al, 2006).

The updated model includes all independent variables from the original study plus variables related to REAC scores, census tract minority and homeownership rates, and neighborhood and metropolitan housing market indicators. It also includes the presence of a maturing 236/BMIR mortgage as a potential opt-out risk factor, a variable that would not have been relevant during the previous study period.

Exhibit 5 shows the variables included in the updated analysis. The rightmost column describes the anticipated direction for each variable. For variables repeated in both study periods, this is a description of the results from the previous analysis. For new variables, we suggest an expected direction.

Exhibit 5

Variables for Regression Model (1 of 3)

Variable Type	Variable	Categories	Original Results or Expected Direction
Property	Property size (units)	Less than 50 units (ref.) 50–99 units 100–199 units 200+ units	Original study: Reduced odds of opt-out as project size increases.
	Density	Percent of units with 3 or more bedrooms	Original study: Reduced odds of opt-out as number of larger units increases.
	Occupancy type	Family Elderly/disabled (ref.)	Original study: Increased odds of opt-out in family properties
	Building type	Detached/semidetached Other types (ref.)	Original study: Slightly increased odds of opt-out in detached/ semidetached.
	Ownership type	Nonprofit For-profit/limited dividend (ref.)	Original study: Increased odds of opt-out for for-profit-owned properties.
	REAC	Physical REAC score (1-point increase)	Expected direction: Unknown. Higher REAC score may increase odds of opt-out because properties in good physical condition are more marketable to market-rate tenants. However, owners of properties in poor condition could opt out of subsidy programs to preempt a HUD decision to abate subsidies.
	Ratio of rent-to-FMR	Less than 80% 80–99.9% 100–119.9% (ref.) 120–129.9% 130–139.9% 140–159.9% 160% or more	Original study: Strongly increased odds of opt-out for properties with lower rent-to-FMR ratios, particularly less than 80 percent.

Exhibit 5

Variables for Regression Model (2 of 3)

Variable Type	Variable	Categories	Original Results or Expected Direction
Financing	Older assisted HUD programs	Older assisted = 1 Newer assisted = 0	Original study: Increased odds of opt-out for older assisted properties.
	100-percent assisted[a]	Projects with 100 percent of units with rental assistance = 1 Other = 0	Original study: Strongly increased odds of opt-out for 100-percent assisted properties.
	FHA insured	FHA insured =1 Other = 0	Expected direction: Lower odds of opt-outs for properties with insured mortgages because some FHA mortgages impose affordability restrictions.
	HFA related	HFA related =1 Other = 0	Unknown: Original results were not statistically significant.
	Mortgage matured	Matured mortgage of 236/ BMIR properties = 1 Other = 0	Expected direction: Higher odds of opt-out for properties with maturing mortgages, because restrictions associated with the mortgage are ending.
Neighborhood	Poverty rate	Percent of persons below poverty level in a census tract	Original results: Lower odds of opt-out for properties in neighborhoods with higher poverty rate.
	Minority rate	Percent of minority (All races except non-Hispanic White) in a census tract	Expected direction: Lower odds of opt-out because of difficulty marketing developments in racially segregated areas.
	Homeownership rate	Percent of owner-occupied housing in a census tract	Expected direction: Unknown. Higher homeownership rate may signal an overall stronger neighborhood housing market but also may imply a smaller surrounding renter population, making it more difficult to attract tenants.
Location	Metropolitan location	Suburbs (ref.) Principal cities Nonmetropolitan	Original study: Increased odds of opt-out for central city and nonmetropolitan locations
	Census division	New England Mid Atlantic East North Central West North Central South Atlantic (ref.) East South Central West South Central Mountain Pacific	Original study: Increased odds of opt-out for Mid Atlantic, East North Central, West North Central, West South Central, Mountain and Pacific regions; decreased odds for New England and East South Central.

Exhibit 5

Variables for Regression Model (3 of 3)

Variable Type	Variable	Categories	Original Results or Expected Direction
Housing market	Neighborhood rent level	Ratio of median gross rent between a census tract and a county	Expected direction: Increased odds of opt-out for properties in neighborhoods with a high tract rent-county rent ratio.
	Neighborhood housing value	Ratio of median value of owner-occupied housing between a census tract and a county	Expected direction: Increased odds of opt-out for properties in neighborhoods with a high tract value-county value ratio.
	Regional sale market	Percent change in HPI 2007 Q1–2012 Q1 25% or more 0–24.99% – 25%~ 0.01% (ref.) – 50%~ – 25.01% Lower than – 50%	Expected direction: Increased odds of opt-out for properties in neighborhoods with positive change in HPI.
	Regional rental market	Percent change in FMR during the recession, 2007 Q1–2012 Q1 20% or more 10%–19.99% 0%–9.99% Less than 0% (ref.)	Expected direction: Increased odds of opt-out for properties in neighborhoods with higher positive change in FMR.

236/BMIR = Section 236 Mortgage Assistance Program and Section 221(d)(3) Below Market Interest Rate Program. FHA = Federal Housing Administration. FMR = Fair Market Rent. HFA = housing finance agency. HPI = Housing Price Index. HUD = U.S. Department of Housing and Urban Development. Q1 = first quarter. REAC = Real Estate Assessment Center. ref. = reference category.

[a] Developments were classified as 100-percent assisted if total units exceeded assisted units by no more than two. The two-unit difference was allowed to account for developments where one or two units are used as management offices.

Exhibit 6 shows the results of the logistic regression model. The odds ratios refer to the odds that an owner will opt out of a Section 8 contract with that particular characteristic. For categorical variables (for example, property size), the odds ratios refer to the characteristics in comparison to the reference group. For continuous variables, the odds ratios show the direction of increase or decrease in odds of opt-out given a positive change in the indicator.

Family properties continued to be at higher risk in the 2005-to-2014 study period. Odds of opt-out for family properties were approximately double those of properties restricted to elderly/disabled tenancy, similar to the results in the original study.

Smaller properties and units also continued to be at higher risk of loss. Properties with fewer than 50 units had a two- to four-times higher risk of opt-out than larger properties. Similarly, as the share of units with three or more bedrooms in a property increased, its risk of opt-out decreased, indicating that properties offering more studio and one- or two-bedroom units were at increased opt-out risk. Both of these results are consistent with the original study.

Two other key risk factors continued to affect opt-outs from 2005 to 2014, but they played a smaller role than in the original study. First, low rent-to-FMR ratios continued to be a risk factor. Odds of opt-out for properties with rent-to-FMR below 80 percent from 2005 to 2014 were three

Exhibit 6

Odds Ratios for Opt-Out Decision Model, 2005–2014

	Variable	Odds Ratio	*p*-value
Property size (ref. under 50 units)	Property size 50–99	0.388	***
	Property size 100–199	0.339	***
	Property size 200+	0.232	***
Density	Percent of units with 3 or more bedrooms	0.332	***
Occupancy types	Family (ref. elderly/disabled)	2.207	***
Building types	Detached or semidetached (ref. other)	1.044	
Ownership types	Nonprofit (ref. for-profit/limited dividend)	0.472	***
REAC physical score	1-percentage-point increase	0.982	***
Program	Older assisted (ref. newer assisted)	0.552	***
	100% assisted units (ref. partially assisted)	0.132	***
	FHA insured	0.432	*
	HFA related	1.999	**
	Matured 236/BMIR mortgage	1.016	
Neighborhood	Poverty rate	0.356	
	Minority rate	0.869	
	Homeownership rate	0.359	**
Rent-to-FMR ratio (ref. 100–119.9%)	Less than 80%	2.990	***
	80–99.9%	1.885	***
	120–129.9%	0.730	
	130–139.9%	0.455	**
	140–159.9%	0.564	*
	160% or more	0.512	*
Metropolitan location (ref. suburbs)	Principal cities	1.213	
	Nonmetropolitan	1.088	
Census division (ref. South Atlantic)	New England	0.363	***
	Mid Atlantic	0.827	
	East North Central	0.612	**
	West North Central	1.233	
	East South Central	0.790	
	West South Central	0.780	
	Mountain	1.879	**
	Pacific	0.853	
Neighborhood market	Neighborhood rent/county ratio	4.036	***
	Neighborhood housing value	1.365	**
Regional sale market (2007–2012) (ref. moderate decline; – 25% to 0% change)	Severe decline: – 50% or more	0.929	
	Decline: – 25% to – 50 %	0.942	
	Growing: 0–25%	1.634	***
	Strongly growing: 25% or more	1.483	
Regional rental market (2007–2012) (ref. FMR declining)	Stable: 0–10%	1.385	
	Growing: 10–20%	1.197	
		1.218	
Total number of properties		10,023	
Opt-outs		361	
Pseudo R^2		0.2101	

236/BMIR = Section 236 Mortgage Assistance Program and Section 221(d)(3) Below Market Interest Rate Program. FHA = Federal Housing Administration. FMR = Fair Market Rent. HFA = housing finance agency. REAC = Real Estate Assessment Center. ref. = reference category.

*** $p < 0.01$. ** $p < 0.05$. * $p < 0.10$.

Sources: U.S. Department of Housing and Urban Development, 2005 and 2014 active properties, active financing, active contracts, and multifamily building type files, Integrated Real Estate Management System; terminated contracts database; terminated multifamily mortgages database; 2005 Picture of Subsidized Households*; 2005 and 2014 FMRs; U.S. Census Bureau, 2005–2009 American Community Survey; Federal Housing Finance Agency Housing Price Index* times those of the 100-to-120 percent of FMR reference case. In the original study, odds of opt-out among properties with rent-to-FMR below 80 percent were nearly 12 times higher than the reference case. Second, properties owned by profit motivated companies continued to be at higher risk. Odds of opt-out for for-profit/limited dividend owned properties from 2005 to 2014 were double those for nonprofit owned properties (compared to a factor of six in the original study). These results suggest that the opportunity for higher rents in the private market continued to play a role in pushing profit-motivated owners of properties with below-market rents to opt out of subsidies, but not to the same degree as in earlier years.

For another key variable, the 2005-to-2014 results differed from the regression analysis in the original study. The original study showed that properties with rental assistance in all units were nearly 14 times more likely to opt out than those with partial Section 8 assistance. In the current analysis, however, fully assisted properties were seven to eight times less likely to opt out than partially assisted properties.

Financing characteristics also had significant effects that differed from the original study. Properties operating under HUD's older assisted programs (see the Data and Methods section) were only one-half as likely to opt out as those funded under newer HUD programs. Properties financed by state housing finance agencies (HFAs) were more likely to opt out than other properties. In contrast, the original study showed that older assisted properties were more likely to opt out and showed no statistically significant effect from HFA financing (Finkel et al., 2006). A possible explanation for the current results is that that the newer assisted properties and the state-financed properties were more likely to be reaching their first opt-out decision during the 2005-to-2014 study period, whereas the older assisted and non-state-financed properties would have actively opted in to Section 8 assistance at least once before 2005. We speculate that owners of properties are more likely to take their first opportunity to opt out rather than to renew a contract initially and subsequently opt out.

We added several variables to the model for the new study. Most of these related to neighborhood and regional market conditions. Opt-out risk was significantly higher for properties in strong neighborhood housing markets, signified by higher ratios of neighborhood (census tract) rents and housing values compared to the surrounding county. On the other hand, although a high homeownership rate might be expected to signal a strong neighborhood housing market, opt-outs were actually less likely in neighborhoods with higher homeownership rates. The lack of an active rental market in heavily owner-occupied neighborhoods may discourage market-rate conversion of properties. At the regional market level, properties in regions where home prices were moderately increasing from 2007 to 2012 were at higher risk of opt-out. Regional rental market changes, measured by changes in the HUD FMR over the same period, did not have a significant effect.[3]

[3] To account for the volatility in the overall housing market during the years under study, we also tested a model that segmented properties by the year of opt-in/opt-out decision into three periods: strong market (2005 to 2007), weak market (2008 to 2011), and recovering market (2012 to 2014). Surprisingly, results did not vary greatly across the three phases. Opt-outs were somewhat less likely among larger properties during the 2012-to-2014 recovering market phase, and during the weak market period the effect of family occupancy on opt-out risk was more pronounced. In general, however, results were consistent across the housing market time periods.

Two other newly added variables showed unanticipated results. First, we expected that Section 8 properties with a maturing 236/BMIR mortgage would be at higher risk of opt-out. The layer of affordability restrictions associated with the mortgage would be expiring. Absent other affordable financing layers, the owner would be free to convert the property to unrestricted rents upon opting out of the Section 8 contract. However, we found no significant effect from a 236/BMIR mortgage maturity.

Second, the risk associated with REAC physical inspection scores was difficult to predict. Higher inspection scores might be expected to increase the risk of opt-outs, as owners seek to convert the properties in the best physical condition to market-rate use. Instead, the model shows a 1-point increase in REAC score resulted in a *decrease* in odds of opt-out of approximately 1.6 percent. Owners of properties in poor physical condition may opt out of assistance preemptively if they expect HUD to abate a subsidy contract. Also, owners who are planning to opt out of subsidies and sell or convert properties to market-rate may delay investing in physical improvements until after the opt-out (Finkel et al., 2006).

In sum, the results confirm the original study's emphasis on the risk of loss for smaller properties and units and for developments serving families. The analysis also substantiates the emphasis on market factors at the property and in the surrounding community. Properties in neighborhoods with higher rents and home values were at heightened risk of opt-out, as were those with profit-motivated owners and rents below the surrounding FMR. However, owner type and rent-FMR ratio demonstrated considerably less influence on opt-outs during the 2005-to-2014 study period than in earlier years.

Preservation of Opt-In Properties

The opt-in/opt-out analysis showed considerably fewer losses in the Section 8-assisted inventory between 2005 and 2014 compared to the original 1998-to-2004 study period. Many of the properties most at risk of loss, either weak properties in financial and physical distress or strong properties with potential to attract market-rate tenants, likely left the assisted inventory during the earlier wave of opt-outs documented by the 1998-to-2004 analysis. The middle-of-the-road inventory that remained from 2005 to 2014 was more stable, particularly as an increasing number of owners had already been required to make one or more active decisions to renew subsidy contracts.

However, another reason that the 2005-to-2014 period may have generated fewer opt-outs is the maturing of the assisted housing preservation infrastructure. In the wake of well-publicized opt-outs in the 1990s, a variety of federal, state, local, and extra-governmental initiatives were put in place to preserve at-risk properties (HUD, 2013b).

- **HUD Mark-to-Market.** The Mark-to-Market program was put in place by the Multifamily Assisted Housing Reform and Affordability Act of 1997[4] to reduce above-market rents among HUD-financed properties with Section 8 assistance. The full restructuring option in Mark-to-Market provides restructured, favorable mortgage terms to owners of Section 8 developments

[4] Pub. L. 105–65. 111 Stat. 1344, October 27, 1997.

in exchange for reducing rents to market values. It acts as a preservation program in that participating owners agree to long-term affordability, typically through a 20-year Section 8 contract and a 30-year use agreement[5] (HUD, 2015, 2002).

- **Low-Income Housing Tax Credit Program allocations for preservation.** LIHTC can be used to finance the acquisition and rehabilitation of at-risk Section 8 properties by preservation-minded owners. According to the National Housing Trust, 45 states provide incentives for preservation through allocation of competitive (9-percent) tax credits, including 16 states with explicit set-asides for preservation (National Housing Trust, n.d.). States also devote private activity bonds and noncompetitive (4-percent) credits to preservation projects.

  Adding tax credits to an existing Section 8 development provides resources to improve financial and physical conditions at aging properties. LIHTC also imposes at least 30 years of tenant income and rent restrictions, which reduces the incentive for owners to opt out of Section 8 affordability provisions.

- **Federal Housing Administration (FHA)-insured mortgage refinancing.** A number of Section 8 properties have undergone refinancing through market-rate FHA-insured funding programs. These funding sources do not carry income or rent restrictions, so their presence does not necessarily signal a long-term commitment to affordability. Nevertheless, many recipients of these mortgages commit to long-term Section 8 contract renewals.

- **Preservation funding from state HFAs.** Many HFAs use affordable housing trust funds, grants and loan programs to provide additional predevelopment and gap financing for preservation of federally assisted units.

- **Preservation databases, including risk-targeting data.** A number of states and cities have launched property databases or improved existing data tools to flag properties at risk of loss to the affordable inventory.[6]

- **Additional state, local, and nongovernmental initiatives.** Beginning in 2001, the John D. and Catherine T. MacArthur Foundation's Window of Opportunity initiative underwrote tremendous growth in the rental preservation infrastructure, including support for capacity building among national and local nonprofit developers, building sources of private capital for preservation, local and state interagency preservation councils, legal assistance and organizing support for tenants, and policy advocacy and research (MacArthur Foundation, 2009).

[5] Mark-to-Market also offers a "Lite" option, which calls for reduction of rents without Federal Housing Administration mortgage restructuring. It is not included here as a preservation initiative because it only requires a 5-year renewal of Section 8 assistance and no long-term use agreement.

[6] See, for example, the Shimberg Center's Florida Assisted Housing Inventory at http://flhousingdata.shimberg.ufl.edu/AHI_introduction.html; CEDAC's database for Massachusetts at https://cedac.org/housing/housing-preservation; and the NYU Furman Center's Subsidized Housing Inventory Project at http://datasearch.furmancenter.org. The National Housing Preservation Database website includes a page of links to additional state and local preservation databases, at http://www.preservationdatabase.org/preservation-resources/local-partner-databases.

Preservation Transaction Types

In this analysis, we describe the presence of the first three financing tools—Mark-to-Market full restructuring, LIHTC allocations, and FHA mortgage refinancing—among the properties classified as Section 8 opt-ins in the 2005-to-2014 dataset. In addition, we explore the extent to which preservation resources are targeted toward at-risk properties. The potentially preserved properties are compared with other opt-in properties in terms of the risk factors identified in the multivariate analysis, such as family occupancy and rent-FMR ratios below 80 percent.

To determine whether the opt-in properties received these types of financing, the dataset of opt-in properties was matched to financing information from the National Housing Preservation Database (NHPD) and HUD's Mark-to-Market transactions database. Opt-in properties were considered to have a potential preservation transaction if the NHPD identified LIHTC as a funding source or HUD's database indicated the properties completed a Mark-to-Market full restructuring. A property also was considered to have a potential preservation transaction if the NHPD indicated FHA-insured refinancing *and* the property owner renewed the Section 8 contract for 19 to 20 years or longer during the 2005-to-2014 study period. We reasoned that the contract extension signaled a commitment to long-term affordability at the time the property was refinanced.[7]

In most cases, the preservation transactions took place during the 2005-to-2014 study period. Transactions were also included if they predated 2005, because earlier subsidies still could incentivize or require owners to opt in to the Section 8 program during the study period. Specifically, for LIHTC, 62 percent of properties had transactions between 2005 and 2014. Most of the rest received tax credits from 1997 to 2003. For HUD refinancing, 87 percent of properties had transactions between 2005 and 2014, with the remainder occurring from 1998 to 2004. For Mark-to-Market, 67 percent of properties closed on restructuring between 2005 and 2014, with the remainder occurring between 1999 and 2004.[8]

As a convenient shorthand, properties with at least one of these interventions are referred to as "preserved" in the following discussion, and the opt-ins without any of these interventions are referred to as "nonpreserved." In fact, *preservation* has no standard definition. Some of the preserved properties would have been unlikely to leave the inventory even without these additional interventions, and some of the nonpreserved properties may have undergone preservation interventions other than the three types tracked here. In particular, we are unable to track the use of grants and loans from state HFAs and local funders to preserve properties, because no single database tracks these funding sources for the national Section 8 inventory.

[7] Specifically, properties were included if their financing included one or more of these HUD programs: Section 207/223(f) and Section 223(a)(7), which provide mortgage insurance for purchase or refinancing of existing multifamily housing, and Section 542, under which HUD provides mortgage insurance in a risk-sharing agreement with state HFAs that lend to affordable housing projects. Section 8 contract renewal terms were measured in months from the date of renewal to the date of expiration. A small number of contracts had terms of 228 to 239 months; that is, 20 years minus a few months. These were included in the top category to account for delays in the contract renewal process that might slightly shorten the term.

[8] Note that the preservation analysis includes only properties with opt-ins during the 2005-to-2014 study period. It does not include previously preserved properties where the owner did not make an active opt-in choice between 2005 and 2014. For example, properties would not be included if they completed Mark-to-Market restructuring and signed a 20-year Section 8 contract prior to 2005.

Prevalence of Preservation Transactions

Use of the preservation tools was widespread among opt-in properties. In all, 3,561 properties with 328,394 units underwent at least one potential preservation transaction. This amounts to 28 percent of opt-in properties and 34 percent of units.

Exhibit 7 shows the distribution of opt-in properties across combinations of preservation interventions. It also shows the length of the term for the last Section 8 contract renewal executed during the 2005-to-2014 study period.

Among LIHTC-funded developments, most were funded using 4-percent credits, alone (830 properties/53 percent) or in combination with 9-percent credits (438 properties/28 percent). 9-percent credits alone were used only 19 percent of the time (285 properties).[9]

A common use of the HUD tool was the refinancing of direct loans from HUD's Section 202 program. From 1959 to 1990, the 202 program provided 40- to 50-year low-interest loans to nonprofit organizations for construction, rehabilitation, and acquisition costs for housing for elderly residents and persons with disabilities. HUD provides owners of Section 202 developments with the option to prepay and refinance 202 loans to reduce interest rate and debt service and to make capital improvements (HUD, 2013a). Nearly half (44 percent) of HUD-financed preservation properties in the opt-in dataset had inactive Section 202 loans. The preservation and stability of Section 202 developments are explored in more depth in Ray et al. (2015).

Exhibit 7

Opt-In Properties by Preservation Transactions and Contract Renewal Length

Preservation Indicator	Total Properties	Section 8 Renewal Term (%)		
		1–5 Years	5–18 Years	19 Years or More
LIHTC only	1,559	33	7	61
HUD refinancing only	1,045	NA	NA	100
Mark-to-Market only	240	15	27	59
LIHTC with HUD	279	NA	NA	100
LIHTC with Mark-to-Market	86	9	16	74
Mark-to-Market with HUD	282	NA	NA	100
All three programs	70	NA	NA	100
All preserved	3,561	16	5	79
All nonpreserved	9,111	62	6	32

HUD = U.S. Department of Housing and Urban Development. LIHTC = Low-Income Housing Tax Credit Program. NA = not applicable.

Notes: Renewal term refers to last contract renewal executed during the 2005–2014 study period. HUD refinancing was used as a preservation indicator only if the property also had a contract renewal of at least 19–20 years, so all HUD-financed preserved properties are in the 19 Years or More category by definition. Also, Mark-to-Market properties are required to remain affordable for 30 years, so shorter-term contracts are expected to be renewed.

Sources: HUD, 2005 and 2014 active properties, active financing, and active contracts files, Integrated Real Estate Management System; National Housing Preservation Database

[9] Percentages refer to developments for which credit type was available in the NHPD (1,556 of 1,994 developments).

Length of Affordability

The preservation tools appear to be effective in ensuring long-term affordability. Most of the preserved properties were operating under rental assistance contracts with terms of 19 to 20 years or more by the end of the 2005-to-2014 period (exhibit 7). All HUD-refinanced preservation properties were operating under contracts of at least 20 years by our own preservation definition, but the long-term contracts were also prevalent among LIHTC-only preservation properties (68 percent), Mark-to-Market-only properties (59 percent), and LIHTC/Mark-to-Market properties (74 percent). Moreover, LIHTC-funded properties are further protected by tenant income and rent restrictions extending at least 30 years from the date of tax credit funding, and longer in some states. Three-fourths of LIHTC-preserved opt-in properties in the dataset had income and rent restrictions extending until 2030 or later, including 32 percent with restrictions extending beyond 2040.

Nonpreserved properties were far more likely to be operating under short-term contracts. Of nonpreserved properties, 62 percent were operating under contracts renewed for 5 years or less at the end of the 2005-to-2014 study period. Although many owners do continue to renew short-term Section 8 contracts when they expire, the short-term contracts leave the opt-out choice open at every renewal point. These properties will require special attention and expansion of preservation initiatives to ensure that they continue to remain affordable.

Preservation Status and Opt-Out Risk Factors

Although preservation transactions offered widespread and long-term affordability protections, the record of targeting these protections toward properties most at risk of opt-out was mixed. Exhibit 8 shows the prevalence of the key opt-out risk factors among properties with each type of preservation transaction, compared with the nonpreserved opt-in properties.

Preservation efforts using LIHTC and Mark-to-Market do appear to be more targeted toward properties with two key opt-out risk factors: for-profit/limited dividend ownership and family occupancy. First, most properties with LIHTC funding and, in particular, Mark-to-Mark restructuring were owned by for-profit or limited dividend corporations. In contrast, most nonpreserved properties were owned by nonprofits. Note that this risk factor tracks the ownership type at the 2005 baseline; some of the preserved properties may have been transferred to nonprofit organizations subsequently as part of the preservation transaction. Second, most LIHTC and Mark-to-Market properties were designated for family occupancy, compared to a minority of nonpreserved properties.

In contrast, preserved developments with HUD-insured mortgages were less likely than nonpreserved properties to be owned by for-profits or to have family occupancy. This is linked to the heavy use of HUD refinancing to preserve properties with Section 202 loans. The 202 program requires elderly or disabled occupancy type and nonprofit ownership.

The other risk factors generally were equally or even less prevalent among the preserved properties compared to other opt-ins. Two risk factors stand out. First, small properties are at heightened risk of opt-out, but preservation resources were disproportionately found in larger properties. Half of the nonpreserved properties had fewer than 50 units, but only about one-fourth of the preserved properties did. Second, rent-FMR ratios below 80 percent were not more prevalent among

Exhibit 8

Presence of Risk Factors Among Opt-In Properties by Preservation Type

Risk Factor	Properties in Preservation Category With Risk Factor (%)							
	LIHTC Only	HUD Refinancing Only	Mark-to-Market Only	LIHTC With HUD	LIHTC With Mark-to-Market	Mark-to-Market With HUD	All Three Programs	All Non-preserved
Rent-to-FMR ratio < 80% (percent of properties)	11	3	5	6	8	2	4	11
For-profit/limited dividend ownership (percent of properties)	62	24	87	56	93	88	91	36
Family occupancy (percent of properties)	54	15	68	39	70	63	66	38
1–49 units (percent of properties)	29	28	24	19	19	29	21	51
Share of 0- to 2-bedroom units (average for properties)	85	96	81	88	79	80	80	90
Partially assisted (percent of properties)	16	7	6	13	14	5	11	14
Neighborhood poverty rate (average for properties; lower is risk factor)	23	20	30	22	25	26	27	21
Neighborhood homeownership rate (average for properties; lower is risk factor)	49	53	46	49	51	50	52	53
Neighborhood rent/county rent ratio (average for properties; higher is risk factor)	89	92	86	90	87	91	84	92

FMR = Fair Market Rent. HUD = U.S. Department of Urban Housing and Development. LIHTC = Low-Income Housing Tax Credit Program.

Sources: U.S. Department of Housing and Urban Development, 2005 and 2014 active properties, active financing, active contracts, and multifamily building type files, Integrated Real Estate Management System; terminated contracts database; terminated multifamily mortgages database; U.S. Census Bureau, 2005–2009 American Community Survey; National Housing Preservation Database

LIHTC-preserved properties than nonpreserved properties, and they were nearly absent among the HUD-financed and Mark-to-Market properties.[10] That is, it does not appear that LIHTC and other preservation resources were particularly targeted toward properties whose low rents compared to the surrounding market may encourage owners to convert to market rate.

Similarly, preservation resources do not appear to have been targeted toward neighborhoods with demographic and market conditions that raise opt-out risk. Averages for neighborhood indicators such as poverty rate, homeownership rate, and the ratio of neighborhood to county median rents were similar between preserved and nonpreserved properties. In fact, compared to the nonpreserved properties, Mark-to-Market properties were in neighborhoods with higher poverty rates and lower neighborhood rent-county rent ratios—both factors that point away from opt-out risk.

To summarize, a substantial number of opt-in properties have received preservation assistance. The preservation interventions are working as intended by encouraging long affordability periods, in contrast to the short contract renewal periods common among unpreserved properties. Preservation interventions have been effectively targeted toward properties with two well-understood risk factors, for-profit ownership and family occupancy. Other identified risk factors such as small property size, low rent-FMR ratios, and strong neighborhood market characteristics are not more prevalent among preserved properties. Future preservation initiatives can further reduce the risk of opt-outs by more careful targeting of developments with these characteristics.

Conclusion

The comparison of property outcomes between Finkel et al. (2006) and this update shows how HUD's multifamily portfolio has shifted in the last two decades. The Section 8-assisted inventory demonstrated more continuity between 2005 and 2014 than in the original 1998-to-2004 study period, even as HUD's original 221(d)(3) and 236 subsidized mortgage programs were largely phasing out. Fewer properties underwent opt-out, and far fewer were subject to foreclosure and contract abatement. At the same time, more owners actively opted to continue participation in the Section 8 program.

The 2005-to-2014 analysis shows that to the extent Section 8 opt-outs continued to occur, many properties were subject to similar risk factors to those identified in the original study, including family occupancy, for-profit ownership, low rent-FMR ratios, and location in less distressed neighborhoods. Although these factors were present in the second study phase, several were less influential. The descriptive cross-tabulations showed more variability in these characteristics among the properties lost to the affordable inventory, and the regression analysis showed that together these characteristics explained less variation in the opt-in/opt-out decision than before. For example, of the 748 opt-outs, over one-third (271, or 36 percent) was owned by nonprofit organizations, served elderly or disabled tenants, or both.

[10] The lack of Mark-to-Market properties with rents below 80 percent of FMR is to be expected. Mark-to-Market is targeted toward properties with *above*-market rents. For properties that had not completed the Mark-to-Market process at the time of contract renewal during the 2005-to-2014 study period, the rent-FMR ratio would reflect the above-market rents. For those that had completed restructuring, it still is unlikely that rents would be reduced as far as a level below 80 percent of FMR.

The analysis shows that a significant minority of the remaining Section 8 properties operate under conditions that protect them from opt-out risk. Thousands of properties operate under extended affordability periods associated with preservation financing tools. In particular, preservation with LIHTC has extended affordability periods for many Section 8 developments well into the future. Most of the preserved properties are owned by for-profit corporations and serving families, two characteristics that signaled higher opt-out risk in both the original study and the 2005-to-2014 update.

At the same time, the preservation analysis points up risk to properties without these additional interventions. The majority of Section 8 contracts in nonpreserved developments were renewed for terms of 5 years or less. The preservation tools do not seem to be targeted toward small developments in strong neighborhood and regional housing markets—exactly the types of properties that might be at risk of market-rate conversion as rental markets tighten and neighborhoods revitalize or gentrify. Preserving these developments may require efforts that bundle several small properties into single transactions or new financing tools that can be scaled for small developments.

We suggest several additional areas of research to improve our understanding of risks and preservation in the assisted housing inventory. First, we recommend detailed, year-over-year analysis of contract renewal histories to determine the extent to which the proliferation of short-term renewals signals future risk to the inventory. Do owners who renew a contract for 1 to 5 years tend to renew these contracts again upon expiration, or do short-term renewals signal an impending opt-out? Constructing full opt-in histories will require annual Section 8 contract datasets. The two point-in-time datasets available for this study provided a partial picture of renewals, but information was not available about short-term renewals in the intervening years between 2005 and 2014.

Second, given the weakened influence of the traditional opt-out risk factors, we recommend further examination of opt-outs in developments without these risk factors. These include developments serving elderly residents or persons with disabilities, nonprofit-owned properties, and developments that do not appear to be especially vulnerable to market-rate conversion (for example, those in distressed neighborhoods or whose contract rents are in line with or higher than the surrounding market rate). Case studies could help us understand the factors that lead to non-traditional opt-outs, such as changes in nonprofits' interest and ability to maintain aging subsidized properties.

Third, we recommend more indepth analysis of state policies on the use of LIHTC to preserve the HUD-assisted inventory. As noted previously, nearly all states provide some type of set-aside or other incentive to promote use of tax credits for preservation. These policies are present in states' Qualified Allocation Plans (QAPs) and other public documentation of scoring for LIHTC competitive allocations. Do states with robust preservation incentives in their QAPs report more opt-ins, potential preservation actions, and 20-year Section 8 contract renewals compared to states with weaker incentives? What types of incentives are most effective in promoting preservation?

Finally, the changes between Finkel et al. (2006) and this update demonstrate the value of continuing to update property characteristics and opt-in/opt-out histories. Conditions in the assisted housing inventory are not static. Ownership changes. Properties may age and deteriorate, or they may be rehabilitated. Length of remaining affordability changes over time; even 20-year contracts put into place in the early part of the 2005-to-2014 study period are already more than halfway to their expiration date. Neighborhood and regional housing markets also are not static. With rental markets tightening and affordable housing in short supply, properties in neighborhoods where opt-outs would have seemed unlikely in the past may become ripe for market-rate conversion. Accurate and up-to-date property information will be critical to continue the preservation efforts that have successfully maintained the assisted housing inventory.

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References

Finkel, Meryl, Charles Hanson, Richard Hilton, Ken Lam, and Melissa Vandawalker. 2006. *Multifamily Properties: Opting In, Opting Out and Remaining Affordable*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. huduser.org/Publications/pdf/opting_in.pdf.

John D. and Catherine T. MacArthur Foundation (MacArthur Foundation). 2009. "Window of Opportunity: Preserving Affordable Rental Housing Investment Summary," *Evidence Matters*. https://www.macfound.org/press/publications/window-opportunity-state-and-local-housing-preservation-project/.

National Housing Trust. n.d. "National Trends (Incentives for Preservation in State Qualified Allocation Plans and Set-Asides for Preservation in State Qualified Allocation Plans)." http://www.prezcat.org/related-catalog-content/incentives-preservation-state-qualified-allocation-plans-2014.

Ray, Anne, Jeongseob Kim, Diep Nguyen, and Jongwon Choi. 2015. *Opting In, Opting Out a Decade Later*. Multi-Disciplinary Research Team. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

U.S. Department of Housing and Urban Development (HUD). 2016. "Picture of Subsidized Households." huduser.gov/portal/data sets/assthsg.html.

———. 2015. "M2M Transactions Report." http://portal.hud.gov/hudportal/documents/huddoc?id=m2mstran.xls.

———. 2013a. *Updated Requirements for Prepayment and Refinance of Section 202 Direct Loans*. HUD Notice H-2013-17. Washington, DC: U.S. Department of Housing and Urban Development. http://portal.hud.gov/hudportal/documents/huddoc?id=13-17hsgn.pdf.

———. 2013b. "Preserving Affordable Rental Housing: A Snapshot of Growing Need, Current Threats, and Innovative Solutions," *Evidence Matters*. huduser.org/portal/periodicals/em/EM_Newsletter_Summer_2013_FNL.pdf.

———. 2002. "Frequently Asked Questions on Mark-to-Market for Property Owners and Managers." https://portal.hud.gov/hudportal/documents/huddoc?id=DOC_19531.pdf.