



Patterns of Housing Voucher Use Revisited: Segregation and Section 8 in 2013

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Since the 1990s, there has been significant academic and policy interest in the “geography of opportunity” (Briggs 2005) and how federal housing assistance connects low-income households to place-based opportunity. Empirical research has shown that where individuals reside—particularly where children are born and grow up—is closely correlated with their future health, education, and employment outcomes (Chetty et al. 2014). Better health, educational attainment, and income are all associated with residing in lower poverty, higher opportunity neighborhoods.

As a result, there has been considerable research into the U.S. Department of Housing and Urban Development (HUD) programs, particularly regarding the location and neighborhood characteristics of HUD-assisted households. Also known as the Housing Choice Voucher (HCV) program, HUD’s Section 8 voucher program has received attention specifically because it was designed to integrate assisted households into the private market. Although some research has found that voucher households are fairly widely dispersed (Devine et al. 2003) and located closer to high performing schools than traditional public housing residents or those in poverty more generally (Horn, Ellen, and Schwartz 2014), voucher households remain highly concentrated in poorer neighborhoods (McClure, Schwartz, and Taghavi 2014) and further from high performing schools (Horn, Ellen, and Schwartz 2014) relative to more general segments of the population. Talen and Koschinsky (2014) found that HUD-assisted households, including voucher holders, reside in neighborhoods with poor access to services and amenities. Moreover, longitudinal analyses provide little or no evidence of improvement over the last decade, with voucher households consistently concentrated in high-poverty and minority population neighborhoods (McClure, Schwartz, and Taghavi 2014; Metzger 2014a).

By focusing on comparisons to other housing assistance programs and broad population categories (e.g., all households, all renters, or all households in poverty), this literature stops short of explaining the extent to which the HCV program itself actually contributes to segregation and the concentration of poverty. Because the voucher household population has fairly distinct characteristics from all these groups, even from other housing programs, it is difficult to say whether the observed segregation of voucher holders is driven by the program or by more general features of housing markets or—more broadly—the economy and society.

To provide greater insight into the voucher program’s association with racial and economic segregation, this paper builds on the analysis of Metzger (2014a) by using the Comprehensive Housing Affordability Strategy (CHAS) data from 2007–2011 and a special tabulation of the Picture of Subsidized Housing (PoSH) data from 2013. These data allow us to more clearly define comparison groups and provide a more complete geographic picture of the distribution and characteristics of voucher households.

Previous Research on Voucher Household Locations

There have been a number of recent more general reviews of the research on the location of vouchers (Metzger 2014a; Sard and Rice 2014). In this paper, we focus on recent studies (table 1) similar to the current research in their

Table 1. Recent analyses of the segregation and opportunities of voucher holders

	VARIABLE OF INTEREST/ DEPENDENT VARIABLE	COMPARISON GROUP(S)	HOUSING MARKET AND POLICY VARIABLES	OTHER NEIGHBORHOOD CHARACTERISTICS
This paper	Income and race segregation indexes	ELI renters (HUD income limits) by racial/ethnic minority status	SOI legislation	Household income and minority share
McClure and Johnson (2015)	Assisted housing and welfare recipients as a share of the housing stock	Other assisted housing, households on welfare, rental units	None	Race, ethnicity, unemployment, and poverty tract shares, central city/suburbs, median rents
Metzger (2014a)	Income and race segregation indexes	ELI households (approximated as <\$15,000)	SOI legislation	Household income and minority share
Horn, Ellen, and Schwartz (2014)	Proficiency rate and other characteristics of nearby schools	Households with children in poverty, renters, other HUD subsidized households	Occupied housing units with rents below FMR, mean rent, vacancy	None
McClure, Schwartz, Taghavi (2014)	Voucher share of occupied housing and of housing with rents below the FMR	All households	None	Race, ethnicity, and poverty tract shares, central city/suburbs
Talen and Koschinsky (2014)	Walk score	Other HUD subsidized households	% vacant, market strength score, land use diversity, gross density	Minority share, crime, school performance, brownfields

methods, use of data, and their definition of comparison groups. The variables of interest in these papers vary, but all five papers in table 1, including the current research, are broadly interested in the quality of the neighborhoods in which voucher holders live. Horn, Ellen, and Schwartz (2014) are interested in access to better schools. Talen and Koschinsky (2014) look at access to services and amenities, comparing block groups with high walk scores to those with low walk scores by the proportions of subsidized households and across a range of neighborhood quality variables. McClure and colleagues examine the distribution of vouchers across census tracts of various characteristics (McClure, Schwartz, and Taghavi 2014; McClure and Johnson 2015).

Despite the variation in the variables of interest, we might expect the variables used to establish comparison groups to be similar. As table 1 indicates, here too can be seen considerable variation. Horn, Ellen, and Schwartz (2014), Talen and Koschinsky (2014), and McClure and Johnson (2015) provide comparisons across subsidized housing programs. Because these programs might be considered different approaches to serve similar (or in some cases the same)¹ households, this approach provides insight into the relative effectiveness of different programs in assisting beneficiaries moving to higher quality neighborhoods, however defined. This approach does not address, however, whether voucher households fare better as a result of receiving voucher assistance.²

McClure and Johnson (2015) also compare households with housing assistance to those receiving Temporary Assistance for Needy Families (TANF). In many ways this population is similarly needy as households in the HCV and other housing programs. But they are also likely to be different from housing assisted households in important ways. In general, states must use TANF funds

1 It is important to note that Low-Income Housing Tax Credit (LIHTC) can be combined with many of the HUD programs (the HUD programs cannot be combined with each other). Thus, there is likely double counting in these. It is difficult to provide an authoritative estimate of the extent of the overlap, but for a rough sense of the magnitude of this overlap, our tabulations of the Rental Housing Finance Survey suggest that 87 percent of LIHTC *projects* benefit from at least one Housing Choice Voucher, and a recent report from HUD of available administrative data finds that at least 36 percent of LIHTC units are assisted by monthly housing assistance, primarily HCVs (Hollar 2014).

2 It is important to remember that housing assistance receipt is not an entitlement and recipients are selected in a variety of ways from a much larger eligible population. Roughly one in four eligible households receives HUD's rental assistance. The Moving to Opportunity (MTO) program created a controlled experiment to address a related question about the effect of location on assisted households in five cities that has provided a trove of research. However, the MTO experiment is not directly relevant here. First, it primarily used the voucher program to test a hypothesis rather than being a test of the voucher program itself. Second, in the MTO experiment, the control group was in public housing, not unassisted. Third, the intervention directed the treatment group of interest to specific low-poverty neighborhoods.

to serve families *with children* and a significant proportion of those receiving cash assistance are in owner-occupied housing.³ The housing assistance programs examined in this paper serve a full range of households from individuals to childless couples and families and they are almost entirely renters. Also, eligibility criteria and in particular the level of income for someone receiving cash assistance can vary from state to state, as can benefit levels and work-related activities required of applicants. HUD programs provide less such leeway and the variation is rarely at the state level. A final complication is that roughly 11 percent of households receiving HCVs also receive TANF assistance (U.S. Department of Housing and Urban Development 2015a).

While comparing voucher assisted households to unassisted eligible households is perhaps the ideal, little easily accessible data exist to identify this population. Therefore, another approach is to compare the voucher assisted households to a more general population of which they are part. Horn, Ellen, and Schwartz (2014), McClure, Schwartz, and Taghavi (2014), and McClure and Johnson (2015) take this approach. McClure, Schwartz, and Taghavi make an implicit comparison of voucher holders to the distribution of all households. Horn, Ellen, and Schwartz (2014) compare the location of assisted households to that of households in all rental units—as do McClure and Johnson (2015)—and units renting below HUD’s Fair Market Rent (FMR), the local rent limit used in administering the voucher program. Horn, Ellen, and Schwartz also use poor households as a reference sample.

The difficulty with these comparisons is that the characteristics of renters who use a voucher differ from all households, all renters, and even all those who rent modest homes (i.e., below FMR). For example, they are by definition lower income and also more likely to be minorities in urban areas. Similarly, many voucher users are poor, but the typical voucher household in a specific metropolitan statistical area (MSA) may have an income above the national poverty level. This is because the poverty rate is set nationwide and voucher program income limits vary with the local income levels.⁴ Moreover, not all those in poverty are renters (e.g., retirees who occupy a home they own free and clear).⁵

These recent analyses provide useful insight into two related questions: (1) are voucher households located in similar neighborhoods with similar access to opportunity compared to the general population; and (2) are voucher holders

3 According to the Current Population Survey’s Annual Social and Economic Supplement in 2014, 23 percent of children in TANF households live in owner-occupied housing (U.S. Census Bureau 2014).

4 Horn, Ellen, and Schwartz (2014) find that 72.6 percent of voucher holders nationwide are poor. As a side note, starting with the 2014 income limits, the extremely low-income (ELI) threshold is set at the poverty level or the traditional ELI threshold, whichever is greater.

5 Also, even many who are renters are unlikely to apply for or benefit from a voucher (e.g., college students).

located in neighborhoods with similar access to opportunity as recipients of other assistance programs? The answer to the former question is generally no; the latter is more mixed, but the consensus is that voucher holders fare better than those in most place-based housing assistance programs serving a similarly low-income population (Horn, Ellen, and Schwartz 2014; McClure, Schwartz, and Taghavi 2014; Talen and Koschinsky 2014). McClure and Johnson (2015) find voucher holders fare worse than those receiving TANF but better than in other HUD housing programs in the measures of neighborhood quality.

The limitations of the control groups make the literature less qualified to determine whether the voucher program itself contributes to, works against, or is simply a nonfactor in racial and economic segregation among the population likely to be eligible and apply for a voucher. To assess the performance of the voucher program in addressing segregation for the specific population it was meant to assist, Metzger (2014a) defined her comparison group empirically using program data to better approximate the voucher population. Rather than using poverty, she selected an income cutoff (\$15,000 annually) based on the distribution of voucher household income nationally. Sensitivity analyses included comparison groups with annual income cutoffs of \$10,000 and \$25,000. The results suggested that voucher holders were not only more economically and racially segregated than the general population but also those with similar incomes. On a more positive note, Metzger also found that local “source of income” (SOI) protection laws appeared to mitigate this result.

Given the limitations of the publicly available American Community Survey (ACS) data at the tract level, the comparison in Metzger (2014a) was to all households below the \$15,000 income limit and not cross-tabulated with any other characteristics known to describe the voucher population. In particular, tenure and minority status, which are well known to determine housing market opportunities for assisted and unassisted households alike, could not be accounted for. This paper improves on the previous analysis by further specifying the comparison group.

Data and Methods

Data Sources

Following Metzger (2014a), this study is a tract-level analysis of the same 50 MSAs, the most populous in 2000. Data on the location and characteristics of voucher households come from a special tabulation of the 2013 Picture of Subsidized Households (PoSH) data obtained from HUD through a data license request. In the public PoSH dataset, the characteristics of voucher

Table 2. Characteristics of HCV households in the 50 sample metropolitan areas

	MINIMUM ACROSS MSAs	MAXIMUM ACROSS MSAs	MEAN ACROSS MSAs	SD ACROSS MSAs
VLI	91.1%	98.4%	96.1%	1.5%
ELI	64.3%	86.1%	76.9%	4.5%
Minority	33.9%	99.8%	76.1%	14.3%
Black	0.2%	93.7%	57.8%	23.9%
Native American	0.0%	3.7%	0.6%	0.8%
Asian	0.0%	36.1%	2.7%	5.9%
Hispanic	0.7%	99.6%	14.9%	18.9%
VLI and Minority	33.0%	93.2%	72.8%	13.3%
ELI and Minority	27.6%	76.8%	58.2%	10.7%
Total HCVs	5,122	206,828	25,437	31,410

Note: ELI = Extremely low income, HCV = Housing choice voucher, MSA = Metropolitan statistical area, SD = Standard deviation, VLI = Very low income.

holders are suppressed for census tracts with between 1 and 10 voucher holders. In this data, the values for a selection of characteristics⁶ are not suppressed in these low-voucher tracts. The removal of suppression improves the geographic comparability of the PoSH data to the ACS data at the tract level.

The data used here also include the percentage of voucher households that are both minority and extremely low-income (ELI) according to HUD income limits, a variable not included in the public PoSH data. According to the Quality Housing and Work Responsibility Act of 1998 (QHWRA),⁷ 75 percent of vouchers must serve ELI households (Devine et al. 2000); in our data 77 percent of voucher holders fall into this income category (table 2).

The data for the comparison groups come primarily from the 2007–11 Comprehensive Housing Affordability Strategy (CHAS) data. CHAS data are ACS data tabulated by the Census Bureau for HUD using income limits and other categories relevant to HUD programs. These data provide the same ELI cutoffs for the general population used in the PoSH data to describe the HUD-assisted population.

6 These characteristics include the percentage of voucher households that have household incomes below HUD’s very low-income threshold, the percentage below the extremely low-income threshold, and the percentage minority.

7 Title V of Pub.L. No. 105–276, 112 Stat. 2518, approved October 21, 1998.

Data from the ACS (2007–11) is used to create an additional comparison group: households that earn less than \$15,000 annually. These data are used to update the analyses in Metzger (2014a). Tract-level income and race and ethnicity data from the ACS is also used to calculate the segregation indexes, described in detail below.

Defining the Comparison Groups

The three data sources used for this paper allow calculation of residential patterns for two voucher groups, all voucher households and minority voucher households, and four comparison groups:

1. households that earn less than \$15,000 annually (ACS),
2. ELI renters (CHAS),
3. cost-burdened ELI renters (CHAS), and
4. minority ELI renters (CHAS).

Households with less than \$15,000 in annual income are used to establish continuity with previous research. The comparison groups of interest are the various ELI renter categories. These should better approximate the voucher-eligible population by using the program's local income limits and focusing on renters. The voucher program is a rental program that primarily serves households that are renters when they enter the program. More importantly perhaps, rental housing, particularly the modest rental housing that serves voucher holders, is itself highly concentrated in a relatively few neighborhoods in many metropolitan areas.

This paper examines the ELI renter population with unaffordable housing-cost burdens, which sharpens the focus on voucher-eligible households likely to be in need of assistance. Households are considered to have an unaffordable housing-cost burden if they spend more than 30 percent of their income on housing-related costs. Extremely low-income renters without cost burdens already have low rents, in some cases because they already receive housing assistance. Households with a cost burden should be more motivated to apply for and benefit from voucher assistance.⁸

This paper also specifically compares minority voucher holders to minority ELI households. It is well established that minority renters face discrimination

8 While households with assistance can be expected to have lower cost burdens than they would without assistance, depending on the measures of income and rent used many of these households do fall above the 30 percent income threshold used in federal programs. The percentage paying more than 30 percent of income is estimated at above 40 percent in the Housing Choice Voucher program (Leopold et al. 2015).

in the rental market, independent of their status as voucher holders (Roscigno, Karafin, and Tester 2009). This comparison controls for minority status and provides insight into the role of vouchers in serving minority households specifically.

A final set of analyses examines differences in voucher location patterns between MSAs with SOI fair housing protections and those without such local legislation. The Poverty and Race Research Action Council (2015) provided the inventory of SOI laws.

Segregation Indexes

Using these merged datasets, this paper considers the segregation of voucher households by income and by race/ethnicity. Neighborhood income patterns are measured using two indexes: the Herfindahl index and the dissimilarity index.

To compute the economic Herfindahl index, census tracts within each MSA are divided into deciles by tract median income. The Herfindahl index scores indicate the extent to which voucher households are evenly distributed across these income deciles. Metzger (2014a) provides a more complete description of the calculation of this index. Calculated across income deciles, the Herfindahl index could take a value ranging from 0.1 (the most dispersed voucher population) to 1 (the most concentrated voucher population).

The economic dissimilarity index scores are calculated to measure the extent to which voucher households and middle- and upper-income households reside in the same census tracts (Massey and Denton 1988). For the purpose of the income dissimilarity index, middle- and upper-income households are defined as those that earn \$50,000 or more annually. A higher dissimilarity index suggests greater segregation between HCV households and middle- and upper-income households, interpreted as the percentage of households from one group who would have to relocate to be evenly dispersed among households from the other group.

For racial concentration, the Herfindahl index is employed, tracts in each MSA are divided into deciles by the percentage of the tract population that self-reported as non-Hispanic and white, and the Herfindahl index is computed using these deciles. Similarly, the racial dissimilarity index reflects the overlap of voucher households and non-Hispanic, white residents.

The differences in the respective segregation indexes between groups is calculated using the nonparametric Kolmogorov-Smirnov equality-of-distributions test (Lilliefors 1967) because of the non-normal distribution of segregation indexes across MSAs.

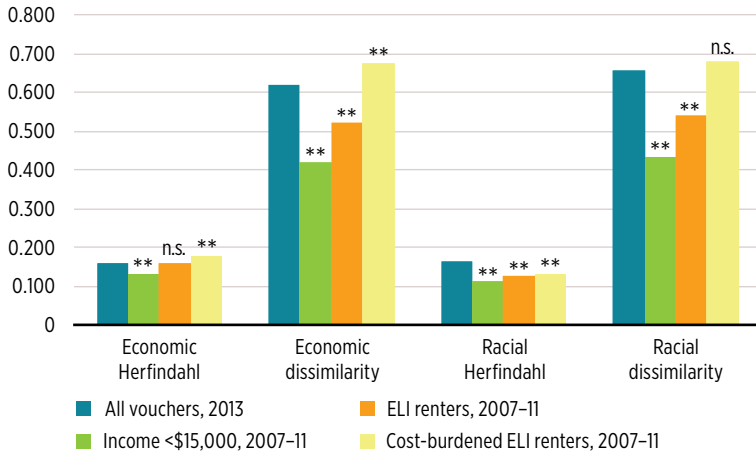
Results

Figures 1 and 2 present the results for each of the four segregation measures for voucher holders and the four comparison groups. The full set of results reflected in these figures, as well as specific MSA by MSA results, are provided in appendix tables 1–8.

Figure 1 shows results for all renters in each group, regardless of race/ethnicity. Replicating previous findings (Metzger 2014a), voucher holders are more segregated than households earning less than \$15,000 across all measures of racial and economic segregation ($p < .001$). This pattern of greater segregation among HCV households remains holds true compared to ELI renters for three of the four measures: economic dissimilarity, racial concentration, and racial dissimilarity ($p < .001$). However, the patterns change significantly when compared to the cost-burdened ELI renter group. HCVs renters are less economically segregated than this comparison group as measured by both measures of economic segregation ($p < .001$). They are more segregated in terms of racial concentration ($p < .001$), but there is no significant difference in terms of the racial dissimilarity index.

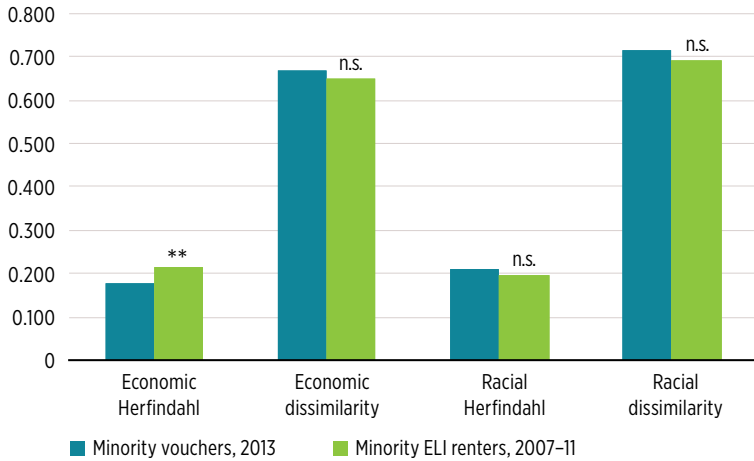
The minority voucher holder comparisons provide further insight into this pattern of findings. Figure 2 shows that minority voucher holders are little

Figure 1. Summary of findings for all households



Note: ELI = Extremely low income
 n.s. p ≥ .01 compared to voucher holders
 * p < .01 compared to voucher holders
 ** p < .001 compared to voucher holders

Figure 2. Summary of findings for minority households



Note: ELI = Extremely low income
 n.s. $p \geq .01$ compared to minority voucher holders
 * $p < .01$ compared to minority voucher holders
 ** $p < .001$ compared to minority voucher holders

differentiated from other minority ELI households. Minority vouchers are slightly less segregated in terms of the economic concentration index ($p < .001$), but there is no statistically significant difference in the other three measures of segregation.

An additional set of models examined whether differences between voucher households and the respective comparison group differed between MSAs with SOI protections and those without. Metzger (2014a) provides a description of the statistical methods used. Contrary to Metzger’s results using data from 2008, these difference-in-difference models provided few statistically significant results. Overall, voucher households appeared more dispersed than the respective comparison groups in regions with SOI protections, but only in comparison to households earning less than \$15,000 annually did these differences near the statistical significance threshold of 1 percent used here ($p = .11$ for economic dissimilarity, $p = .13$ for racial concentration, $p = .13$ for racial dissimilarity).

Discussion

In this research and in Metzger (2014a), on average across all 50 MSAs, voucher holders are more concentrated economically and reside in greater-share minority neighborhoods than all households that earn less than \$15,000

annually. This confirmation of Metzger's earlier results gives us confidence that differences in the data alone are not likely to be driving the mixed results using the improved comparison groups.

Compared to all ELI renter households, the program appears to have little impact, positive or negative, on deconcentrating voucher households away from lower income neighborhoods, according to the economic Herfindahl index. However, voucher holders do appear to live in higher income neighborhoods when compared to the cost-burdened ELI renters (i.e., those likely to need assistance). A similar pattern is revealed for economic dissimilarity. Voucher holders are less likely to live with middle- and higher-income households than ELI renters generally, but they are more likely to do so than those ELI renters that are housing-cost burdened. These findings may indicate that voucher holders fare better than those in need of assistance in reaching higher income neighborhoods and living closer to middle- and higher-income households.

On average, minority voucher holders and minority ELI households are concentrated in relatively few neighborhoods and rarely live in the same neighborhoods as non-low-income households within their MSA. In particular, having a voucher appears to have little impact on minority households when it comes to moving away from racially and ethnically segregated communities. There is evidence, however, that minority voucher households do move away from lower income communities. The implication is that the relatively higher-income neighborhoods minority households reach using their voucher still have relatively high percentages of minority residents as well.

The rent limits applied in the HCV program (Fair Market Rents), generally limit households to homes offered for rent at or below the median rent in the metropolitan area and there is no federal requirement that landlords renting units otherwise eligible for the program accept voucher holders on an equal basis to cash renters.⁹ In the absence of any other local effort or program mechanism to facilitate integrating these households, it is perhaps not surprising that voucher households on average find their way into only slightly higher income neighborhoods (those with modestly higher rents) but are less likely to settle in neighborhoods with lower shares of minority households than similar households generally.

When the individual MSA results are scrutinized (appendix tables 5–8), it becomes clear that the MSA a voucher holder lives in matters. Some broader geographic patterns are also discernible by region of the United States. For example, HCV programs in Southeastern MSAs tend to perform

9 Accepting a voucher holder as a tenant comes with additional paperwork and responsibilities for the landlord relative to renting to a cash renter. So even in the absence of other biases, all else being equal, voucher holders may be at a disadvantage in the rental market.

the worst with regard to patterns of segregation. Voucher holders in Atlanta and Birmingham are consistently among the most segregated across multiple measures of segregation and multiple comparison groups. In Birmingham, the racial concentration (Herfindahl index) was .218 for voucher holders and .121 for cost-burdened ELI renters. In Atlanta, the racial concentration (Herfindahl index) was .250 for minority voucher holders and .160 for minority ELI renters. The best performing HCV programs, by the measures used here, tended to be clustered in the Southwest and in California. Phoenix's economic dissimilarity index, for example, is .604 for minority voucher holders and .659 for minority ELI renters.

That minority HCV holders are more segregated than minority ELI renter households in the Southeast is an interesting result that deserves further study. It is not immediately obvious why voucher holders appear to be *more disadvantaged* in these areas. It might be expected that these MSAs, with well-established and historically determined racial divisions, would offer fewer residential locations for lower income minorities in general, but this would not be expected to put voucher holders at a specific disadvantage.

The apparent greater integration of voucher holders in the Southwest is also interesting. Perhaps the relatively recent, rapid development of the MSAs in the region in the post-civil rights era has not led to firmly established patterns of segregation. It may also be simply an artifact of data limitations: a general designation for "minority" does not differentiate white Hispanics and others from the predominantly African American population of the Southeast.

There are other interesting results in these data to be investigated. At first, Baltimore, Maryland, stands out for being relatively well integrated according to the indexes, when the city is known for its concentration of poverty and troubled housing programs. However, advocacy and a court case against the Housing Authority and HUD, the so-called Thompson case, have resulted in a number of mobility interventions in the city and surrounding area that are now being lauded for moving HCV families to higher income and less racially concentrated neighborhoods throughout the region (Darrah and DeLuca 2014). There have been other prominent modifications of the voucher program meant to explicitly achieve mobility goals that resulted from court cases and policy experiments such as the Gautreaux decision in Chicago and the Moving to Opportunity (MTO) experiment in five cities (including Baltimore and Chicago along with Boston, Los Angeles, and New York). These have all been limited in both local scale and geographic application and prove more of the exception than the rule, with McClure (2010) concluding that under standard program rent rules there are too few units of voucher-accessible housing in high opportunity neighborhoods.

Finally, the comparison of MSAs with and without SOI protections produced fewer significant results than in previous research. However, it is important to note that the sample of MSAs was updated from the previous analysis of vouchers in 2008 (Metzger 2014a) to include those MSAs that passed SOI protections in the interim years. It is possible that the more recently added legislation was too new to exert any significant influence on voucher outcomes. Moreover, an MSA was considered an “SOI” MSA even if only one municipality in that MSA included SOI protections. Future research should examine the distribution of vouchers within the specific municipalities containing SOI protections, rather than relying solely on the coarser MSA-level patterns.

What explains the persistent racial concentration and segregation experienced by voucher program participants? On their own, these indexes cannot show whether program design or local policy, landlord or tenant biases—or likely a combination of factors—explain the outcomes. The concentration of voucher recipients in low-income neighborhoods appears more obviously tied to the program’s rent rules and the local context in which it is operating. A variety of policy solutions could be implemented in order to address economic concentration (Sard and Rice 2014). Several of these solutions are discussed below. With a program more clearly designed and implemented to foster integration, the fair housing limitations could be better assessed and addressed.

Source of Income Protections

Metzger (2014a) found that source of income protections had a significant effect in mitigating the concentration of voucher households. In this research, the effect was not statistically significant, but the direction was similarly negative suggesting this policy should remain under consideration at the local level. HCVs should be explicitly listed as a source of income protected from housing discrimination.

Eliminate Special Occupancy Permits

HUD has specific housing quality standards that buildings rented to Section 8 participants must meet. In some municipalities, Section 8 inspections are required above and beyond standard requirements. The stated purpose of these inspections is to ensure that Section 8 housing maintains a high quality, but ultimately, they may discourage landlords from participating in the Section 8 program because of the added time and cost required (Metzger 2014b). St. Louis required special Section 8 inspections until recently,

when the city council repealed them. St. Louis could serve as an example to other municipalities in removing any redundant occupancy permits or inspection requirements.

Tax Incentives

Tax incentives are an important tool that local and state governments can use to encourage landlords from low-poverty areas to rent to voucher recipients. For example, Illinois offers a property tax abatement available to landlords who rent to voucher recipients in low-poverty areas (Sard and Rice 2014). The tax incentive is available to landlords in areas with high property values and poverty rates under 10 percent, and public housing authorities are responsible for the administration of the program. State and local governments can also use tax incentives to encourage building low-income housing in low-poverty areas. As federally funded projects, LIHTC projects are compelled to accept voucher holders. Applicants for LIHTCs could receive points on their application, a process administered at the state and local level, for building in low-poverty areas. These financial incentives would encourage the establishment of housing options for voucher recipients in low-income areas of municipalities.¹⁰

Housing Mobility Programs

While local and state governments have a great deal of power to increase the housing options of voucher recipients, they can increase their options even more by partnering with the federal government. This and the recommendations listed below would be carried out by state and local governments in collaboration with the federal government.

Local municipalities could establish additional housing mobility programs in partnership with HUD to support families who want to make “opportunity moves” to low-poverty neighborhoods (Scott et al. 2013). Housing mobility programs involve identifying landlords in low-poverty neighborhoods that would be open to renting to voucher recipients and extending outreach to those landlords to encourage them to participate in the program. Housing mobility programs also work with voucher recipients by providing mobility counseling, providing extended time for housing searches, and

10 The federal government has proposed a step in this direction, by specifying small area Difficult to Development Areas for the LIHTC program that would encourage LIHTC developments in higher rent areas within high-cost metropolitan areas. The current policy designates high-cost metro areas but does not specify high-rent areas more locally within those areas (U.S. Department of Housing and Urban Development 2014).

offering assistance with moving costs and deposits. These programs ultimately benefit the voucher recipients, landlords, and the community.

Small-Area Fair Market Rents

As indicated in the discussion previously, FMRs dictate where voucher recipients can live by establishing the maximum amount of rent that the Section 8 program will cover. Currently, HUD generally sets one FMR for an entire metropolitan area at or below the median rent for a standard quality rental home. This calculation results in many low-poverty neighborhoods not having any Section 8 properties because the rent in those neighborhoods is too high. It may also allow landlords in high poverty neighborhoods to seek higher rents that are above the local market level but still below the FMR. One solution for this is small-area FMRs, where FMRs would be set for smaller areas within a metropolitan region, such as zip codes, instead of the region as a whole. HUD is already piloting this program in a small number of regions (U.S. Department of Housing and Urban Development 2015b). Small-area FMRs should be implemented across the country to increase the number of neighborhoods with Section 8 eligible rental homes and the number of eligible homes within low-poverty and majority white neighborhoods.

Portability of Vouchers

Public housing authorities are responsible for administering vouchers. There are frequently several different housing authorities in a region, each administering their own voucher programs. In many municipalities, it is very difficult to transfer, or “port,” a voucher issued by one housing authority within the jurisdiction of another housing authority. Local governments should work with HUD to make vouchers more portable across housing authorities to maximize a voucher recipient’s housing choice across the region.

Assessment of Fair Housing

HUD recently finalized a new Affirmatively Furthering Fair Housing rule for recipients of various forms of HUD funding (U.S. Department of Housing and Urban Development 2015c).¹¹ HUD already required these grant recipients to comply with the Fair Housing Act,¹² but the new rule requires them to

11 Affirmatively Furthering Fair Housing, 80 Fed. Reg. 42,271 (July 16, 2015), www.gpo.gov/fdsys/pkg/FR-2015-07-16/pdf/2015-17032.pdf.

12 Fair Housing Act, Pub. L. No. 90-284, title VIII (1968), codified at 42 USC 3601-19.

complete an Assessment of Fair Housing (AFH) in order to better evaluate how well they are serving the needs of voucher recipients in protected classes. HUD will use the AFH to provide recommendations to Public Housing Agencies to improve fair housing compliance. Strong enforcement of the Affirmatively Furthering Fair Housing rule could continue to improve the Section 8 program.

Conclusion

These results suggest that though HCV program does not live up to all goals set out for it by policymakers, researchers and advocates interested in encouraging geographic mobility and economic, ethnic, and racial integration, the voucher program is not a failed policy. Not only does it provide a roof over the heads of more than 2 million households, it does a modest job of enabling households, particularly those that are extremely low income and cost burdened or of a minority racial or ethnic group, to move to higher income neighborhoods. The discourse surrounding the program has focused significantly on the issue of housing mobility, fueled by researchers' examinations of the Gautreaux program and the MTO experiment. However, mobility interventions such as these have not been replicated in the HCV program at scale. Ordinary voucher holders do not receive the intensive housing counseling or increased subsidy levels that went into programs like Gautreaux and MTO. As such, it is not surprising that the HCV program does not appear to be a vehicle for widespread integration and dispersal of assisted households; it was simply not designed to serve this purpose. While these results provide a reason for some optimism about the current program's capacity to improve neighborhood circumstances for voucher eligible households, changes to the program and the local policy context are indicated to enhance its capacity to provide greater mobility, effectiveness and efficiency. ■

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Appendix Table 1. Income Herfindahl index: Results across 50 metropolitan areas

	MIN	MAX	MEAN	SD	N
PREVIOUS FINDINGS (METZGER 2014)					
Voucher holders, PoSH 2008	.112	.214	.149	.019	50
Households earning < \$15,000, ACS 2009	.107	.156	.124	.010	50
VOUCHER HOUSEHOLDS, PoSH 2013					
All voucher holders	.111	.210	.160	.019	50
Minority voucher holders	.111	.251	.177	.030	50
COMPARISON GROUPS, ACS/CHAS 2011					
Households warning < \$15,000	.106	.161	.130	.011	50
ELI renters	.114	.184	.157	.015	50
Cost-burdened ELI renters	.110	.251	.178	.031	50
Minority ELI renters	.114	.296	.214	.039	50

Note: ACS = American Community Survey, CHAS = Comprehensive Housing Affordability Study, ELI = Extremely Low Income, PoSH = Picture of Subsidized Households, SD = Standard Deviation

Appendix Table 2. Economic dissimilarity index: Results across 50 metropolitan areas

	MIN	MAX	MEAN	SD	N
PREVIOUS FINDINGS (METZGER 2014)					
Voucher holders, PoSH 2008	.459	.708	.617	.057	50
Households earning <\$15,000, ACS 2009	.358	.594	.491	.052	50
VOUCHER HOUSEHOLDS, PoSH 2013					
All voucher holders	.459	.783	.617	.059	50
Minority voucher holders	.470	.783	.669	.067	50
COMPARISON GROUPS, ACS/CHAS 2011					
Households earning <\$15,000	.322	.504	.418	.039	50
ELI renters	.418	.585	.520	.037	50
Cost-burdened ELI renters	.505	.794	.676	.052	50
Minority ELI renters	.474	.772	.650	.073	50

Note: ACS = American Community Survey, CHAS = Comprehensive Housing Affordability Study, ELI = Extremely Low Income, PoSH = Picture of Subsidized Households, SD = Standard Deviation

Appendix Table 3. Racial Herfindahl index: Results across 50 metropolitan areas

	MIN	MAX	MEAN	SD	N
PREVIOUS FINDINGS (METZGER 2014)					
Voucher holders, PoSH 2008	.121	.216	.157	.020	50
Households earning < \$15,000, ACS 2009	.101	.137	.111	.007	50
VOUCHER HOUSEHOLDS, PoSH 2013					
All voucher holders	.116	.236	.164	.029	50
Minority voucher holders	.118	.330	.209	.051	50
COMPARISON GROUPS, ACS/CHAS 2011					
Households earning <\$15,000	.101	.138	.111	.007	50
ELI renters	.103	.151	.126	.012	50
Cost-burdened ELI renters	.103	.199	.133	.022	50
Minority ELI renters	.103	.331	.195	.057	50

Note: ACS = American Community Survey, CHAS = Comprehensive Housing Affordability Study, ELI = Extremely Low Income, PoSH = Picture of Subsidized Households, SD = Standard Deviation

Appendix Table 4. Racial dissimilarity index: Results across 50 metropolitan areas

	MIN	MAX	MEAN	SD	N
VOUCHER HOUSEHOLDS, PoSH 2013					
All voucher holders	.484	.809	.654	.072	50
Minority voucher holders	.505	.822	.716	.066	50
COMPARISON GROUPS, ACS/CHAS 2011					
Households earning <\$15,000	.310	.565	.433	.059	50
ELI renters	.412	.651	.541	.050	50
Cost-burdened ELI renters	.563	.775	.680	.053	50
Minority ELI renters	.546	.800	.691	.068	50

Note: ACS = American Community Survey, CHAS = Comprehensive Housing Affordability Study, ELI = Extremely Low Income, PoSH = Picture of Subsidized Households, SD = Standard Deviation

**Appendix Table 5a. Economic concentration by MSA
(Herfindahl indexes by tract median income)**

MSA	HCV HOUSEHOLDS, PoSH 2013		COMPARISON HOUSEHOLDS, ACS/CHAS 2011			
	ALL VOUCHER HOLDERS	MINORITY VOUCHER HOLDERS	HOUSEHOLDS EARNING <\$15,000	ELI RENTERS	COST-BURDENED ELI RENTERS	MINORITY ELI RENTERS
Atlanta, GA	.197	.202	.122	.148	.152	.179
Austin, TX	.151	.154	.151	.184	.157	.212
Baltimore, MD	.151	.163	.139	.167	.209	.227
Birmingham, AL	.161	.167	.124	.150	.158	.220
Boston, MA	.153	.199	.133	.158	.175	.264
Buffalo, NY	.186	.251	.132	.171	.200	.288
Charlotte, NC	.167	.170	.126	.151	.160	.193
Chicago, IL	.164	.182	.124	.148	.173	.200
Cincinnati, OH	.151	.184	.128	.156	.177	.256
Cleveland, OH	.149	.165	.127	.153	.190	.225
Columbus, OH	.155	.174	.132	.151	.146	.210
Dallas, TX	.153	.156	.135	.159	.176	.193
Denver, CO	.179	.184	.148	.180	.205	.220
Detroit, MI	.161	.176	.131	.165	.177	.239
Hartford, CT	.210	.244	.142	.181	.184	.288
Houston, TX	.141	.143	.124	.149	.147	.178
Indianapolis, IN	.160	.186	.118	.143	.133	.201
Jacksonville, FL	.152	.157	.122	.147	.209	.213
Kansas City, MO	.145	.175	.129	.146	.165	.222
Las Vegas, NV	.111	.111	.134	.171	.185	.196
Los Angeles, CA	.150	.162	.121	.145	.153	.170
Louisville, KY	.183	.244	.132	.165	.231	.278
Memphis, TN	.149	.150	.125	.148	.148	.174
Miami, FL	.160	.162	.129	.158	.188	.185
Milwaukee, WI	.148	.187	.123	.142	.142	.224

Note: ACS = American Community Survey, CHAS = Comprehensive Housing Affordability Strategy data, ELI = Extremely Low Income, MSA = Metropolitan Statistical Area, PoSH = Picture of Subsidized Households

**Appendix Table 5b. Economic concentration by MSA
(Herfindahl indexes by tract median income) *continued***

MSA	HCV HOUSEHOLDS, PoSH 2013		COMPARISON HOUSEHOLDS, ACS/CHAS 2011			
	ALL VOUCHER HOLDERS	MINORITY VOUCHER HOLDERS	HOUSEHOLDS EARNING <\$15,000	ELI RENTERS	COST-BURDENED ELI RENTERS	MINORITY ELI RENTERS
Minneapolis, MN	.169	.196	.140	.179	.189	.296
Nashville, TN	.187	.200	.134	.169	.196	.252
New Orleans, LA	.152	.156	.109	.122	.143	.151
New York, NY	.194	.199	.150	.178	.247	.234
Oklahoma City, OK	.160	.167	.121	.141	.146	.176
Orlando, FL	.149	.150	.114	.134	.135	.153
Philadelphia, PA	.182	.221	.161	.182	.227	.280
Phoenix, AZ	.133	.130	.136	.166	.174	.205
Pittsburgh, PA	.180	.236	.117	.143	.168	.263
Portland, OR	.167	.178	.133	.160	.184	.174
Providence, RI	.155	.209	.129	.156	.162	.247
Richmond, VA	.148	.154	.136	.175	.251	.220
Riverside, CA	.134	.134	.126	.151	.151	.163
Rochester, NY	.144	.186	.122	.149	.157	.253
Sacramento, CA	.142	.156	.133	.163	.184	.197
San Antonio, TX	.171	.176	.129	.150	.185	.174
San Diego, CA	.164	.178	.118	.152	.151	.191
San Francisco, CA	.158	.176	.141	.168	.218	.209
San Jose, CA	.153	.158	.119	.149	.163	.170
San Juan, PR	.120	.120	.106	.114	.110	.114
Seattle, WA	.182	.191	.142	.169	.186	.212
St. Louis, MO	.169	.207	.126	.153	.160	.255
Tampa, FL	.148	.161	.119	.153	.214	.203
Virginia Beach, VA	.158	.162	.127	.163	.249	.212
Washington, D.C.	.190	.210	.149	.178	.188	.222

Note: ACS = American Community Survey, CHAS = Comprehensive Housing Affordability Strategy data, ELI = Extremely Low Income, MSA = Metropolitan Statistical Area, PoSH = Picture of Subsidized Households

Appendix Table 6a. Dissimilarity index by MSA (vs. households earning >\$50,000/year)

MSA	HCV HOUSEHOLDS, PoSH 2013		COMPARISON HOUSEHOLDS, ACS/CHAS 2011			
	ALL VOUCHER HOLDERS, 2013	MINORITY VOUCHER HOLDERS	HOUSEHOLDS EARNING <\$15,000	ELI RENTERS	COST-BURDENED ELI RENTERS	MINORITY ELI RENTERS
Atlanta, GA	.652	.663	.392	.509	.698	.596
Austin, TX	.654	.677	.451	.528	.695	.604
Baltimore, MD	.574	.612	.459	.560	.727	.683
Birmingham, AL	.703	.739	.421	.531	.665	.692
Boston, MA	.514	.657	.373	.451	.542	.675
Buffalo, NY	.642	.762	.439	.559	.689	.772
Charlotte, NC	.641	.658	.413	.513	.679	.641
Chicago, IL	.640	.688	.416	.521	.702	.647
Cincinnati, OH	.635	.755	.447	.549	.672	.760
Cleveland, OH	.642	.720	.473	.584	.723	.747
Columbus, OH	.651	.739	.474	.551	.666	.708
Dallas, TX	.644	.663	.452	.542	.721	.632
Denver, CO	.596	.623	.449	.545	.728	.635
Detroit, MI	.657	.722	.459	.583	.729	.746
Hartford, CT	.671	.717	.447	.554	.639	.742
Houston, TX	.662	.673	.441	.537	.712	.616
Indianapolis, IN	.680	.780	.452	.572	.662	.752
Jacksonville, FL	.645	.672	.377	.485	.698	.642
Kansas City, MO	.617	.715	.449	.525	.667	.700
Las Vegas, NV	.459	.470	.385	.504	.777	.578
Los Angeles, CA	.576	.619	.381	.476	.628	.561
Louisville, KY	.626	.721	.426	.540	.663	.722
Memphis, TN	.673	.677	.504	.585	.685	.663
Miami, FL	.617	.628	.403	.517	.687	.594
Milwaukee, WI	.657	.765	.467	.550	.692	.754

Note: ACS = American Community Survey, CHAS = Comprehensive Housing Affordability Strategy data, ELI = Extremely Low Income, MSA = Metropolitan Statistical Area, PoSH = Picture of Subsidized Households

Appendix Table 6b. Dissimilarity index by MSA
 (vs. households earning >\$50,000/year) *continued*

MSA	HCV HOUSEHOLDS, PoSH 2013		COMPARISON HOUSEHOLDS, ACS/CHAS 2011			
	ALL VOUCHER HOLDERS	MINORITY VOUCHER HOLDERS	HOUSEHOLDS EARNING <\$15,000	ELI RENTERS	COST-BURDENED ELI RENTERS	MINORITY ELI RENTERS
Minneapolis, MN	.589	.647	.410	.515	.655	.687
Nashville, TN	.703	.738	.430	.543	.669	.686
New Orleans, LA	.662	.680	.385	.496	.695	.615
New York, NY	.634	.676	.447	.526	.671	.643
Oklahoma City, OK	.661	.705	.428	.529	.665	.653
Orlando, FL	.617	.629	.342	.479	.723	.567
Philadelphia, PA	.666	.709	.476	.548	.707	.703
Phoenix, AZ	.581	.604	.439	.556	.764	.659
Pittsburgh, PA	.648	.783	.380	.506	.626	.743
Portland, OR	.519	.593	.356	.446	.658	.559
Providence, RI	.563	.694	.401	.503	.576	.725
Richmond, VA	.619	.642	.440	.559	.698	.649
Riverside, CA	.559	.569	.395	.506	.671	.571
Rochester, NY	.601	.707	.431	.541	.671	.765
Sacramento, CA	.525	.592	.390	.495	.684	.568
San Antonio, TX	.642	.658	.448	.540	.686	.602
San Diego, CA	.561	.613	.349	.482	.655	.571
San Francisco, CA	.524	.576	.385	.462	.621	.551
San Jose, CA	.500	.526	.322	.418	.575	.474
San Juan, PR	.783	.783	.415	.480	.505	.480
Seattle, WA	.558	.629	.374	.460	.625	.584
St. Louis, MO	.649	.741	.413	.523	.666	.723
Tampa, FL	.592	.621	.362	.515	.794	.659
Virginia Beach, VA	.594	.614	.407	.524	.728	.624
Washington, D.C.	.560	.589	.428	.500	.683	.590

Note: ACS = American Community Survey, CHAS = Comprehensive Housing Affordability Strategy data, ELI = Extremely Low Income, MSA = Metropolitan Statistical Area, PoSH = Picture of Subsidized Households

**Appendix Table 7a. Racial concentration by MSA
(Herfindahl indexes by percent-white)**

MSA	HCV HOUSEHOLDS, PoSH 2013		COMPARISON HOUSEHOLDS, ACS/CHAS 2011			
	ALL VOUCHER HOLDERS	MINORITY VOUCHER HOLDERS	HOUSEHOLDS EARNING <\$15,000	ELI RENTERS	COST-BURDENED ELI RENTERS	MINORITY ELI RENTERS
Atlanta, GA	.236	.250	.109	.123	.114	.160
Austin, TX	.222	.250	.113	.128	.112	.170
Baltimore, MD	.150	.182	.121	.141	.153	.215
Birmingham, AL	.218	.245	.112	.137	.121	.221
Boston, MA	.155	.274	.116	.133	.140	.272
Buffalo, NY	.181	.290	.118	.146	.143	.280
Charlotte, NC	.169	.188	.108	.123	.133	.175
Chicago, IL	.206	.245	.113	.129	.130	.181
Cincinnati, OH	.176	.308	.115	.133	.150	.331
Cleveland, OH	.151	.193	.113	.131	.138	.204
Columbus, OH	.159	.252	.111	.119	.118	.228
Dallas, TX	.176	.199	.112	.121	.129	.153
Denver, CO	.148	.185	.114	.125	.130	.170
Detroit, MI	.148	.194	.115	.133	.128	.225
Hartford, CT	.194	.241	.124	.147	.139	.258
Houston, TX	.164	.176	.108	.115	.120	.132
Indianapolis, IN	.173	.236	.107	.121	.128	.219
Jacksonville, FL	.214	.234	.116	.138	.167	.212
Kansas City, MO	.147	.219	.110	.121	.131	.212
Las Vegas, NV	.131	.143	.103	.109	.126	.121
Los Angeles, CA	.125	.151	.103	.109	.109	.129
Louisville, KY	.195	.300	.121	.151	.198	.301
Memphis, TN	.175	.179	.115	.128	.112	.159
Miami, FL	.161	.165	.103	.112	.113	.123
Milwaukee, WI	.169	.255	.111	.124	.119	.221

Note: ACS = American Community Survey, CHAS = Comprehensive Housing Affordability Strategy data, ELI = Extremely Low Income, MSA = Metropolitan Statistical Area, PoSH = Picture of Subsidized Households

Appendix Table 7b. Racial concentration by MSA (Herfindahl indexes by percent-white) *continued*

MSA	HCV HOUSEHOLDS, PoSH 2013		COMPARISON HOUSEHOLDS, ACS/CHAS 2011			
	ALL VOUCHER HOLDERS	MINORITY VOUCHER HOLDERS	HOUSEHOLDS EARNING <\$15,000	ELI RENTERS	COST-BURDENED ELI RENTERS	MINORITY ELI RENTERS
Minneapolis, MN	.175	.228	.117	.138	.140	.263
Nashville, TN	.202	.255	.111	.135	.146	.243
New Orleans, LA	.181	.191	.105	.114	.120	.146
New York, NY	.142	.178	.117	.131	.139	.182
Oklahoma City, OK	.162	.208	.107	.120	.118	.171
Orlando, FL	.158	.167	.106	.120	.119	.152
Philadelphia, PA	.177	.232	.138	.150	.166	.255
Phoenix, AZ	.129	.144	.104	.119	.127	.143
Pittsburgh, PA	.169	.330	.107	.126	.134	.305
Portland, OR	.135	.210	.108	.117	.116	.169
Providence, RI	.132	.225	.113	.132	.130	.297
Richmond, VA	.168	.183	.120	.142	.196	.206
Riverside, CA	.117	.127	.102	.110	.107	.127
Rochester, NY	.135	.198	.112	.131	.133	.241
Sacramento, CA	.152	.216	.107	.119	.124	.150
San Antonio, TX	.128	.133	.105	.111	.114	.122
San Diego, CA	.122	.142	.103	.109	.112	.127
San Francisco, CA	.131	.149	.106	.112	.127	.132
San Jose, CA	.116	.122	.105	.111	.111	.116
San Juan, PR	.118	.118	.101	.103	.103	.103
Seattle, WA	.152	.226	.111	.122	.124	.178
St. Louis, MO	.204	.298	.114	.135	.129	.259
Tampa, FL	.182	.245	.106	.140	.168	.241
Virginia Beach, VA	.177	.187	.116	.141	.199	.192
Washington, D.C.	.177	.205	.117	.128	.137	.169

Note: ACS = American Community Survey, CHAS = Comprehensive Housing Affordability Strategy data, ELI = Extremely Low Income, MSA = Metropolitan Statistical Area, PoSH = Picture of Subsidized Households

Appendix Table 8a. Racial dissimilarity index by MSA

MSA	HCV HOUSEHOLDS, PoSH 2013		COMPARISON HOUSEHOLDS, CHAS 2011			
	ALL VOUCHERS	MINORITY VOUCHERS	HOUSEHOLDS EARNING <\$15,000	ELI RENTERS	COST-BURDENED ELI RENTERS	MINORITY ELI RENTERS
Atlanta, GA	.757	.770	.456	.578	.710	.689
Austin, TX	.708	.729	.440	.525	.681	.612
Baltimore, MD	.651	.706	.514	.618	.760	.758
Birmingham, AL	.775	.822	.433	.570	.647	.758
Boston, MA	.551	.702	.399	.481	.563	.715
Buffalo, NY	.641	.771	.429	.552	.682	.784
Charlotte, NC	.680	.700	.405	.527	.669	.677
Chicago, IL	.728	.782	.500	.607	.741	.743
Cincinnati, OH	.635	.774	.417	.528	.651	.778
Cleveland, OH	.678	.763	.493	.606	.727	.787
Columbus, OH	.631	.752	.425	.502	.630	.704
Dallas, TX	.692	.719	.475	.575	.723	.678
Denver, CO	.605	.641	.446	.546	.726	.647
Detroit, MI	.691	.774	.480	.606	.739	.800
Hartford, CT	.702	.749	.471	.572	.653	.766
Houston, TX	.749	.763	.508	.605	.726	.697
Indianapolis, IN	.674	.792	.424	.546	.649	.764
Jacksonville, FL	.677	.708	.372	.489	.681	.665
Kansas City, MO	.609	.726	.425	.509	.645	.710
Las Vegas, NV	.489	.505	.378	.501	.770	.590
Los Angeles, CA	.679	.745	.489	.584	.691	.696
Louisville, KY	.600	.714	.382	.512	.645	.712
Memphis, TN	.793	.799	.565	.651	.692	.742
Miami, FL	.713	.727	.474	.598	.739	.697
Milwaukee, WI	.689	.808	.483	.571	.694	.791

Note: ACS = American Community Survey, CHAS = Comprehensive Housing Affordability Strategy data, ELI = Extremely Low Income, MSA = Metropolitan Statistical Area, PoSH = Picture of Subsidized Households

Appendix Table 8b. Racial dissimilarity index by MSA *continued*

MSA	HCV HOUSEHOLDS, PoSH 2013		COMPARISON HOUSEHOLDS, CHAS 2011			
	ALL VOUCHERS	MINORITY VOUCHERS	HOUSEHOLDS EARNING <\$15,000	ELI RENTERS	COST-BURDENED ELI RENTERS	MINORITY ELI RENTERS
Minneapolis, MN	.598	.660	.399	.508	.640	.694
Nashville, TN	.700	.742	.382	.513	.633	.686
New Orleans, LA	.758	.780	.457	.565	.710	.694
New York, NY	.720	.796	.551	.627	.730	.772
Oklahoma City, OK	.650	.700	.382	.494	.623	.636
Orlando, FL	.647	.665	.349	.489	.710	.600
Philadelphia, PA	.706	.759	.513	.587	.731	.760
Phoenix, AZ	.602	.635	.426	.555	.763	.675
Pittsburgh, PA	.622	.774	.332	.469	.594	.739
Portland, OR	.484	.573	.318	.412	.627	.546
Providence, RI	.549	.691	.378	.482	.566	.719
Richmond, VA	.676	.700	.460	.590	.712	.697
Riverside, CA	.586	.611	.376	.513	.650	.606
Rochester, NY	.597	.715	.417	.534	.660	.774
Sacramento, CA	.557	.639	.382	.491	.675	.586
San Antonio, TX	.713	.734	.502	.585	.708	.657
San Diego, CA	.603	.671	.372	.501	.671	.613
San Francisco, CA	.596	.654	.437	.513	.652	.614
San Jose, CA	.595	.623	.380	.484	.616	.555
San Juan, PR	.809	.809	.495	.554	.581	.556
Seattle, WA	.560	.640	.370	.463	.621	.599
St. Louis, MO	.676	.790	.421	.540	.664	.772
Tampa, FL	.584	.631	.310	.497	.775	.674
Virginia Beach, VA	.653	.675	.432	.558	.752	.664
Washington, D.C.	.667	.701	.512	.585	.728	.692

Note: ACS = American Community Survey, CHAS = Comprehensive Housing Affordability Strategy data, ELI = Extremely Low Income, MSA = Metropolitan Statistical Area, PoSH = Picture of Subsidized Households