# Graphic Detail

Geographic Information Systems (GIS) organize and clarify the patterns of human activities on the earth's surface and their interaction with each other. GIS data, in the form of maps, can quickly and powerfully convey relationships to policymakers and the public. This department of Cityscape includes maps that convey important housing or community development policy issues or solutions. If you have made such a map and are willing to share it in a future issue of Cityscape, please contact ronald.e.wilson@hud.gov.

# **Concentrated Out-Migration**

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A primary question about the Housing Choice Voucher Program (HCVP) is, "Do participants move far from their previous addresses when they relocate?" Most participants stay within the HCVP for an average of 4 years, but a small percentage of participants stay much longer. Using CrimeStat 3.3, I analyzed 2,891 HCVP participants whose Social Security numbers matched between 2000 and 2010 in the Baltimore metropolitan region to identify the mobility patterns of long-term participants.<sup>1</sup>

Across the region, most long-term HCVP participants did not move far from their previous address. Of those who relocated, 19 percent (556) moved slightly more than 1 mile and 50 percent moved less than 3 miles. Most participants (2,720, or 94.1 percent) moved to another tract, however, 24 percent (688) relocated at distances of more than 6 miles.

I identified a subgroup of participants from four tracts with a large out-migration-to-in-migration difference.<sup>2</sup> One was in Baltimore city and the rest were exurban tracts near Essex, Randallstown, and Severn (see exhibit 1).<sup>3</sup> From these tracts, 132 HCVP participants (4.6 percent) relocated to other tracts.

 $<sup>^1</sup>$ I use two datasets in this analysis: the 2000 census geography and the 2010 Public and Indian Housing Information Center from the U.S. Department Housing and Urban Development.

<sup>&</sup>lt;sup>2</sup> I selected these tracts by first subtracting destination counts from origin counts in a tract, and then identifying tracts with extremely negative net migration—the first percentile.

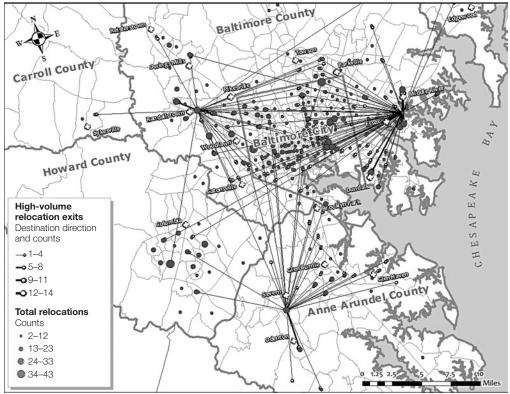
<sup>&</sup>lt;sup>3</sup> The respective numbers of out-migrants were 65 (49.2 percent) for the tract near Essex, 32 (24.2 percent) for the tract near Randallstown, 29 (22.0 percent) for the tract near Severn, and 6 (4.5 percent) for the tract in Baltimore city.

Exhibit 1 reveals three mobility patterns from these four tracts that are different than mobility patterns for the rest of the long-term HCVP participant population in the region. First, although some participants from these four tracts relocated to the same tracts, many moved significantly longer distances—indicated by the black lines—than their counterparts from other tracts; 34 participants (25.7 percent) moved at least 3.9 miles, 66 (50.0 percent) moved more than 6.9 miles, and 33 (25.0 percent) relocated at distances of more than 10.3 miles. Second, most participants dispersed into Baltimore city or the immediate vicinity. Third, many participants relocated to areas with high voucher holder concentrations—indicated by the gray circles—except those who moved out of the tract near Severn.

These results suggest a systematic reason for these single-tract, high-volume exits and the subsequent similarities in the relocation patterns. Further analysis requires other data sources.

#### Exhibit 1

Census Tracts That Showed Significant Out-Migration of HCVP Participants Between 2000 and 2010 in the Central Baltimore Metropolitan Region (equal-interval classification)



HCVP = Housing Choice Voucher Program.

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## References

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