## Targeting Disability Discrimination: Findings and Reflections From the National Study on Housing Discrimination Against People Who Are Deaf and People Who Use Wheelchairs

**Claudia L. Aranda** Urban Institute

#### Abstract

This article highlights the use of the paired-testing methodology to measure housing discrimination against people with disabilities, with special emphasis on the complexities of conducting disability-based testing. It presents findings from the U.S. Department of Housing and Urban Development-sponsored Housing Discrimination Study-Disabilities, which has produced the first national estimates of discrimination in the rental housing market against people who are deaf or hard of hearing and people who use wheelchairs. The results show that people who are deaf or hard of hearing face barriers during the homeseeking process, including communicating with housing providers and learning about available units. People who use wheelchairs face barriers at several points in the process, including finding accessible units, securing appointments with providers and being shown units, and receiving a definite response to their reasonable modification requests. In both studies, testers posed as well-qualified rental homeseekers with the same qualifications and needs. Future paired-testing studies could help produce additional evidence on the homeseeking experiences of people who are deaf or hard of hearing and people who use wheelchairs, including those who are less qualified. Additional testing studies should also focus on the compliance of the current housing stock to the design and construction requirements of the Fair Housing Act. Such findings could help provide critical information about where the need for accessible rental housing is greatest.

## Introduction

The primary goal of the first national paired-testing study of housing discrimination against people who are deaf or hard of hearing and people who use wheelchairs, Housing Discrimination Study-Disabilities (HDS-Disabilities), was to produce national estimates of differential treatment in the rental market (Levy et al., 2014). Funded by the U.S. Department of Housing and Urban Development (HUD) and conducted by the Urban Institute, the study also measured the willingness of housing providers to approve reasonable modification requests made by prospective tenants who use a wheelchair.<sup>1</sup> Because HDS-Disabilities included two distinctly different populations, it was implemented as two separate studies, each with its own methodological, analytical, and practical complexities, many of which are discussed in this article. In both studies, testers posed as well-qualified rental homeseekers with the same qualifications and needs. From the perspective of the housing provider, the only difference between the two testers in a pair (who are matched on sex, race or ethnicity, and age) is their disability status. Testers with the same profiles should receive the same treatment; when housing providers offer different housing costs or terms, the tests provide direct evidence of discrimination. Overall, the findings of HDS-Disabilities highlight the challenges people with disabilities face when they search for a home; although they might not face higher costs, on average, than homeseekers without disabilities, they must contact more housing providers to find housing that meets their needs. The study helps provide important details about the experiences of homeseekers with disabilities, which strongly suggest directions for research, education, and advocacy.

HDS-Disabilities builds on the lessons of the 2005 pilot disabilities study, also funded by HUD and conducted by the Urban Institute, which explored the feasibility of using paired-testing to measure housing discrimination against people with disabilities (Turner et al., 2005).<sup>2</sup> The study findings showed that adverse treatment of people with disabilities occurs more often during the initial stages of housing searches than the adverse treatment of African-American or Hispanic renters (Turner et al., 2005). When housing providers accepted calls of testers who were deaf, the testers received significantly less information about the rental application process and fewer opportunities for followup than did comparable hearing testers who made telephone inquiries. Among people who used wheelchairs and visited rental properties to inquire about advertised units, the findings showed that they were just as likely as testers without disabilities to meet with a housing provider. People who used wheelchairs, however, were told about fewer available units than were testers without disabilities and received less information about the application process, although they were quoted lower fees than were comparable testers without disabilities (Turner et al., 2005). HDS-Disabilities ultimately drew heavily from the protocols and measures used in the pilot study

 $<sup>^{1}</sup>$  A reasonable modification is a structural change made to existing premises, occupied or to be occupied by a person with a disability, in order to afford such person full enjoyment of the premises. Title VIII of the Civil Rights Act, 42 U.S.C. 3604(f)(3)(A).

<sup>&</sup>lt;sup>2</sup> The pilot study tested for discrimination against people who are deaf and hard of hearing and people who are in wheelchairs. The exploratory component of the study implemented various testing scenarios across different disabilities, including people who are blind, who are deaf or hard of hearing, or who have mental disabilities.

and from sampling<sup>3</sup> and field implementation procedures from the more recent 2012 Housing Discrimination Study, which were updated to reflect changes in rental housing markets, housing search practices, and communication technologies (Levy et al., 2014).

## Background

In 1988, the Fair Housing Act was amended to prohibit discrimination in the sale, rental, and financing of housing on the basis of a disability.<sup>4</sup> The amendments, which were enacted in 1989, made it illegal for housing providers to refuse to rent or sell to people with disabilities; impose different qualification criteria; or require different fees, terms, or conditions. The Fair Housing Act requires that housing providers make reasonable accommodations in rules, policies, practices, or services when such accommodations may be necessary to afford a person with a disability the equal opportunity to use and enjoy a dwelling and when such changes do not create an undue burden for the housing provider.<sup>5</sup> In addition, housing providers are required to allow people with disabilities to make reasonable structural modifications at their own cost. Further, the design and construction provisions of the Act require that certain new multifamily dwellings developed for first occupancy on or after March 13, 1991, meet specific accessibility standards.

Since the coverage of the Fair Housing Act was expanded to include people with disabilities, disability discrimination complaints have become the majority of those received by federal and local agencies. In 2013, nearly 54 percent of all fair housing investigations that HUD conducted and 53 percent of all fair housing investigations that local Fair Housing Assistance Program agencies throughout the United States initiated were based on allegations of disability discrimination (NFHA, 2014). The National Fair Housing Alliance also reported that 48 percent of the complaints that member organizations received in 2013 were brought on the basis of disability.

Although fair housing organizations and government agencies alike may be continuing to help preserve access to housing for people with disabilities, the need for accessible housing is expected to continue to rise as the number of older people in the country continues to increase. The exponential level of population growth is undeniable: In 2000, more than 35 million people age 65 or older were living in the United States, comprising 12 percent of the total population (Smith et al., 2012). By 2050, however, fully one-fifth (20 percent) of the U.S. population will be age 65 or older (Jacobsen et al., 2011). "Most of this increase will take place by 2030 as the last of the large baby-boom cohorts reaches age 65" (Jacobsen et al., 2011: 2). By 2040, the population age 80 or older is projected to be 28 million (JCHS, 2014). Smith, Rayer, and Smith (2008: 3) also wrote that "[s]ince disability rates rise with age, the aging of the population will bring large increases in the number of disabled persons." To be more specific, by the age of 85, more than two-thirds of individuals have some type of disability (JCHS, 2014). It is also the case that many working-age people with disabilities are more likely to have low incomes than those without disabilities (She

<sup>&</sup>lt;sup>3</sup> Advertisements were harvested electronically from online sources that included apartments.com, rent.com, move.com, forrent. com, and craigslist.org (Levy et al., 2014).

<sup>&</sup>lt;sup>4</sup> Title VIII of the Civil Rights Act, 42 U.S.C. § 3604(f)(3)(A).

<sup>&</sup>lt;sup>5</sup> Title VIII of the Civil Rights Act, 42 U.S.C. § 3604(f)(3)(B).

and Livermore, 2009), which can limit their ability to save and purchase a home (Hoffman and Livermore, 2012), and which suggests that many people with disabilities will continue to depend on the rental market for accessible housing that meets their needs.

## Complexities in Definition, Analysis, and Field Implementation

The application of the paired-testing methodology to the measurement of discrimination against people with disabilities presented distinct challenges (and choices) in the design, analysis, and field implementation phases of HDS-Disabilities. The first section of this article describes the design and analytical complexities of the study: Compared with the race and ethnicity HDSs, in which testers in a pair had one key characteristic between them that was different (that is, race or ethnicity), tester pairs in HDS-Disabilities had two fundamental differences between them. The specific characteristics at issue for both the deaf and hard of hearing and wheelchair components of the study are described in turn, as are additional, notable design features. The next section addresses the unique field implementation challenges of disabilities testing, which include the heightened risk for detection. The key findings of HDS-Disabilities are presented in the subsequent section followed by recommendations for next steps in research, housing-provider education and outreach, and advocacy.

#### Discrimination Against Homeseekers Who Are Deaf or Hard of Hearing

In the case of the deaf and hard of hearing study, in which testing was conducted remotely via telephone or the Internet, testers in a pair not only differed in their disability status (that is, one tester was deaf or hard of hearing and the other was hearing), but they also differed in the type of telecommunication relay service (TRS) they used to communicate with the housing provider. Hearing testers communicated via telephone and the deaf and hard of hearing testers used one of the three most commonly used TRS types: (1) Video Relay Service (VRS), (2) Internet Protocol Captioned Telephone Service (IP CTS), or (3) Internet Protocol Relay (IP Relay) Service. The project team hypothesized that the only way to remove the technology type variable from the tester pair would be to have control testers also using the same TRS as their deaf or hard of hearing counterpart. The idea was dismissed summarily, however, because hearing testers do not use TRSs to communicate with housing providers. The existence of the two variables in each pair was acknowledged as an inevitable difference between two people, one who is deaf and one who is hearing, communicating remotely with a housing provider. By including different technology types, the testing outcomes ultimately enabled the team to report on differences in treatment for each type.<sup>6</sup>

The three technology types that the deaf and hard of hearing testers used made up about 94 percent of TRS usage volume as of the beginning of the study (Rolka Loube Saltzer Associates, 2012). Data indicated that VRS was the most commonly used TRS overall and was also most used by people who are deaf (Rolka Loube Saltzer Associates, 2012). IP CTS was the second most commonly used TRS overall and was the service most used by people who are hard of hearing (Rolka Loube Saltzer Associates, 2012). After the research design was finalized, the relative usage volumes

<sup>6</sup> See Levy et al. (2014), chapter IV.

for the three TRSs changed. IP CTS became the most used service, followed by VRS and IP Relay (Rolka Loube Saltzer Associates, 2014). Together, these three TRS types largely have supplanted the use of text-telephone (TTY) relay (Levy et al., 2014). The three technologies also differ in how people who are deaf or hard of hearing communicate their messages to call recipients, such as whether the use of an intermediary is necessary, and in the equipment needed to place calls.

When using VRS, a caller who is deaf and uses sign language places a call through a service and uses a video phone or web camera to communicate with a communication assistant (CA). When using VRS for HDS-Disabilities, the tester signed the message to be conveyed to the housing provider, while the CA spoke to the housing provider on the telephone. As the recipient spoke directly to the CA, the assistant signed the response to the tester through VRS. The use of sign language and speech enabled the tester and the housing provider to communicate at or near the pace of spoken language even though they did not have direct contact.

The IP Relay Service is similar to VRS but, instead of signing the message, the caller types it to the CA through an IP Relay website or text application. The CA telephones the recipient and speaks that message. After the recipient speaks a response directly to the CA, the assistant types the response to the caller. The IP Relay typed messages can take 2 to 5 seconds to appear, which can cause a slight delay in communication for both the tester and the housing provider.

Unlike the other two TRSs used in the study, IP CTS enables the user to have partial direct contact with a call recipient. A caller who is deaf or hard of hearing calls the recipient through a captioned telephone service or a captioned website and speaks directly to them. As the recipient speaks a response, a CA repeats the response to the caller and voice recognition technology creates the message in text through the captioned telephone or website. The communication delay associated with typing the call recipient's response can last from 7 to 10 seconds, which is the longest delay of the three technology types.<sup>7</sup>

On HDS-Disabilities, testers who were deaf conveyed their deaf status to the housing provider at the beginning of the contact to ensure the call recipient understood the call was from a person who was deaf.<sup>8</sup> If the housing provider hung up after the first contact, testers were directed to ask the CA if she or he was able to convey that the call was from a person who is deaf before the call was disconnected. If the CA was not able to state as much, the tester made a second attempt to contact the housing provider. If the CA did convey the tester's deaf status before the hangup, the outcome was recorded and no subsequent attempt to contact the housing provider was made. HDS-Disabilities ultimately found that homeseekers who are deaf and use VRS (the technology type whose pace most closely aligns with that of spoken language) are more likely to have housing providers take their calls compared with deaf or hard of hearing testers who contact them using IP Relay or IP CTS. Although housing providers do not take all calls from homeseekers using VRS, housing providers are more likely to tell VRS users (compared with IP CTS or IP Relay users) whether units are available (Levy et al., 2014). It is important to note that, because the use of VRS relies on a person's ability to communicate in sign language, this technology type is not an option for everyone who relies on a TRS.

<sup>&</sup>lt;sup>7</sup> For detailed diagrams showing how the three TRSs function, see Levy et al. (2014), chapter II.

<sup>&</sup>lt;sup>8</sup> For the 2005 pilot disability study, the relay operator explained the TTY call to the recipient at the beginning of the call but otherwise did not explicitly convey that the caller was deaf. The pilot protocol for HDS-Disabilities was modified to ensure the recipient understood the caller was deaf.

#### **Discrimination Against Homeseekers Who Use Wheelchairs**

In the study on discrimination in the rental market against people who use wheelchairs, two testers in a pair also had two key differences between them: (1) their disability status (that is, one tester used a wheelchair and the control tester was ambulatory) and (2) the definition of housing that would meet their needs. For the ambulatory tester, suitable units were defined as "those that are within testers' price range, are available when needed, and have at least the minimum number of bedrooms required for the testers' (assigned) household" (Levy et al., 2014: xi). For the tester using a wheelchair, a suitable unit had to meet the same criteria but also had to be "accessible or modifiable to become accessible" (Levy et al., 2014: xi). Note that for HDS-Disabilities, accessibility was defined as "the ability of a tester who uses a wheelchair to access a building and access available units" (Levy et al., 2014: vi). This operational standard is not strictly equivalent to specific laws or regulations. This second difference between the two testers in a pair could, in and of itself, cause testers to have different outcomes, and it was essential to not confound the availability of accessible housing with differential treatment. The study design addressed this issue, in part, by having local project staff obtain additional information about sampled advertised housing to determine, to the extent possible, whether the building was configured so that a tester using a wheelchair could enter it. During this advance contact phase of the testing process, project staff used online visual tools, such as Google Earth; drove by the property; or, when necessary, asked the housing provider whether the building was accessible to someone with a stroller or who was temporarily on crutches. After the initial site evaluation was completed, only those advertisements for units in buildings believed to be accessible were used to create test assignments.

When testers who used wheelchairs made contact with housing providers over the telephone, they were required to disclose their use of a wheelchair or scooter to help reduce the likelihood that testers would arrive at a site and encounter an obstacle that would prevent the test from continuing. Although both the initial site evaluation and the telephone contact did help to eliminate housing from the sample that the testers in wheelchairs would be unable to enter, the process had its limitations, particularly because it relied on a housing provider's understanding of a building's accessibility features. As a result, during site visits, testers using wheelchairs still encountered barriers when they attempted to enter buildings and also specific units. For example, one agent was surprised to learn that the several steps at the entrance of an apartment complex would preclude a tester from entering the lobby. Because the building had no alternate, accessible entrance, the test could not proceed. After testers in wheelchairs entered a single-family home or multifamily building, they sometimes encountered obstacles such as narrow doorways and high thresholds when attempting to view particular rooms, specific apartments, or both.

During the design phase of the study, the project team determined, in consultation with the expert panel, that testers using wheelchairs should reflect the diversity of the population, which would also allow for analysis on whether the type of wheelchair has any effect on results. More than one-half of the HDS-Disabilities testers in a wheelchair used a power chair (52 percent), 44 percent of the testers used a manual chair, and only 4 percent used a scooter (Levy et al., 2014). Because testers used chairs and scooters that varied significantly in size, the chair or scooter could affect a tester's ability to view specific units because of the structural limitations of the housing and also possibly the housing providers' perceived likelihood that a chair may cause more "wear and tear"

or damage to a unit over time. The study findings showed that housing providers are somewhat less likely to share information about suitable units with homeseekers who use motorized wheel-chairs or scooters than with those who use manual wheelchairs (Levy et al., 2014).<sup>9</sup>

For both components of HDS-Disabilities, the study reports key measures that reflect sequential milestones in the course of a test (Levy et al., 2014).<sup>10</sup> When taken together, the measures provide a rounded picture of both the incidence and severity of differential treatment. In the case of the wheelchair study, this sequential approach to analysis also allowed for the comparison of available units to be undertaken only when a *suitable unit* was observed for a tester who uses a wheelchair; that is, because not all available units are accessible for a person who uses a wheelchair, a comparison of the number of units recommended or shown to both testers of a matched pair would likely overstate differences in treatment. In a similar way, a comparison of whether units could be inspected was undertaken only when a unit was observed (determined in part through the use of tester narratives) to be one that the tester who uses a wheelchair could inspect.

#### **Requests for Reasonable Modifications**

The wheelchair component of HDS-Disabilities also measured the unilateral outcomes for testers in wheelchairs who requested reasonable modifications (Levy et al., 2014). Only testers in wheelchairs made requests for modification; control testers did not. For tests in which suitable units were available for the tester using a wheelchair, the incidence of refusal to a reasonable modification was determined (Levy et al., 2014). The study protocol required testers who used wheelchairs to request an appointment even if they were told the property was not accessible and also to suggest that it might be possible to make a modification to the available housing. When one tester in a pair was unable to secure an appointment, the other tester proceeded with the site visit to collect observational data on building and unit accessibility and, in the case of the tester who used a wheelchair, data on responses to reasonable modification requests. Control testers were trained to notice stairs, thresholds, and other property features that might make a building, lobby area, or available housing units inaccessible to people who use wheelchairs. They documented any such observed features. Testers in wheelchairs were instructed to request up to three modifications, given what they encountered when they arrived at the test site. Because evidence suggests that the number of modification requests can affect the housing provider's willingness to agree, the number of requests was limited to three (Levy et al., 2014). The list of approved modification requests was reviewed and amended by an expert panel composed of researchers, advocates, and HUD staff members to include those modification requests that, in most instances, would be considered reasonable. In addition, testers in wheelchairs were directed to tell housing providers that the modifications would be made at the testers' expense. If questioned further by an agent, testers explained that they would restore a modified unit to its original condition on moving out.

<sup>&</sup>lt;sup>9</sup> Providers also are less likely to show units to people who have quadriplegia than to homeseekers who have paraplegia (Levy et al., 2014).

<sup>&</sup>lt;sup>10</sup> The Urban Institute implemented a similar sequential approach to summarize results in its employment discrimination studies and in Turner et al. (2013).

The list of modifications testers could request included-

- Lobby area and hallways.
  - · Install a lever handle on the door.
  - · Install an interior ramp to make elevators and hallways accessible from the lobby.
- Available and inspected units.
  - · Lower thresholds in doorways over which rolling is difficult.
  - Install a lever handle on the door.
  - Reverse the swing of the entry door.
  - · Lower the placement of light switches.
  - · Reposition outlets.
  - Lower the placement of the thermostat.
  - · Replace thick-pile carpeting with low-pile carpeting, tile, or hardwood flooring.
  - · Replace a standard shower with a roll-in shower.
  - Install grab bars around the toilet or in the shower.
  - Remove the cabinet under the bathroom sink.
  - · Lower the placement of kitchen cabinets.
  - · Replace standard kitchen cabinet shelves with revolving or extending shelves.
  - Remove cabinets under the kitchen sink.

HDS-Disabilities found that when homeseekers who use a wheelchair asked whether modifications that would improve the accessibility of the available units were allowed, housing providers either fail to provide a clear response (21 percent) or explicitly deny (7 percent) more than one-fourth of the requests. Providers who do not provide a clear response say they do not know the answer, need to check with a supervisor, or simply do not offer a final response, which can limit the information a homeseeker has to make an informed and timely decision. Housing providers' modification approval rate varies by the type of request. Housing providers approve more than 80 percent of requests to install bathroom grab bars and lever door handles but approve fewer than 50 percent of requests to lower kitchen cabinets and replace carpets.

#### **Tester Income Level**

During the design phase of HDS-Disabilities, the project team also contemplated the income level testers should be assigned relative to the cost of the housing they sought. On previous HDSs, the testers have all been financial well qualified. By assigning lower incomes, testers' financial qualifications would more accurately reflect the income levels of people with disabilities. As Hoffman and

Livermore (2012) reported, in 2005, 1.1 to 1.4 million households with a working-age person with a disability had worst case housing needs, defined as "very low-income renters who do not receive government housing assistance and who either pay more than one-half of their income for rent, live in severely inadequate conditions, or both" (Nelson, 2008: 1). The project team determined, however, that by limiting the income levels of tester pairs, rather than allowing for them to reflect a range of income levels and relative housing options, the study's focus would essentially shift. Rather than highlighting the experience of testers with disabilities, the study would detail the challenges of people with low income. Another consequence of assigning low incomes to tester pairs is that the study would have effectively excluded a significant segment of the rental housing stock—testers would not have income sufficient to consider many housing options. As a result, the project team determined testers on HDS-Disabilities would be assigned income consistent with past HDS practice, making testers well qualified for the housing about which they inquired.

# Field Implementation Challenges of Testing for Disability Discrimination

The HDS-Disabilities field implementation team faced operational challenges, which were more significant than during previous testing studies because of the inherent complexity of testing for disability discrimination. Of the 29 local organizations that participated in HDS-Disabilities, more than one-third of the groups were centers for independent living or disability advocacy groups and the majority comprised fair housing groups. Most of the disability groups had no previous testing experience, and many of the fair housing organizations that had previously conducted disability testing had done very few tests or else had used actors or proxies representing disabled homeseekers, rather than using people with disabilities as testers. Regardless of the organizations' previous experience or expertise, they all participated in a comprehensive training program, designed in consultation with the project's expert advisors, to help prepare local project managers and test coordinators to skillfully coordinate tests while providing sufficient support to testers with disabilities.<sup>11</sup> Together, the extended field team organized in-person tester training sessions in each of the project sites. For the sessions with deaf and hard of hearing testers, organizations arranged for American Sign Language interpreters to attend trainings and also assist with practice tests. The training sessions for the wheelchair component were held at facilities that could accommodate testers with a variety of different wheelchairs (that is, manual, motorized or power chair, and scooters).<sup>12</sup> In addition to providing specific accommodations at the tester training sessions, the project implemented various modifications to the study's protocols and procedures when they proved necessary. For example, because of the confidential nature of the work, previous HDSs have prohibited nonproject staff from attending training sessions and tester briefings and debriefings. Because some

<sup>&</sup>lt;sup>11</sup> Local project managers and test coordinators attended in-person trainings conducted by Urban Institute staff and also participated in supplemental webinars.

<sup>&</sup>lt;sup>12</sup> At some of the local tester training sessions, coordinators underestimated the amount of space needed to comfortably seat the number of attendees, particularly because of the varying sizes of wheelchairs. As a result, testers in wheelchairs were not able to move in and out of the room as easily as they might have in a larger venue. Any testing organization conducting training sessions with people in wheelchairs should carefully consider the size of the training facilities, the size of the office space, the dimension and placement of tables, and the availability and location of accessible parking and restrooms.

testers who used wheelchairs had personal aides who had to be present for training sessions or drove testers to site visits, however, the project established protocols (and a separate nondisclosure agreement) to delineate what aides could and could not do. Although they could help a tester enter a building where a site visit was being conducted, aides were prohibited from interacting with housing providers and accompanying a tester on the test. In addition, because notetaking was mandatory for all site visits, testers in wheelchairs with manual limitations were allowed to use other means to write down important information; some testers in wheelchairs used tablets or other electronic devices (which some found easier than writing by hand) or else were allowed to ask the housing provider to help them take notes. By outlining such protocol modifications and explicitly defining how they could be implemented, the project's field team helped ensure that procedures were consistently used among the 30 sites coordinating in-person tests.

Although the tests conducted for both components of HDS-Disabilities each had their own unique complexities, the tests completed for the wheelchair study were the most logistically difficult of the 14,000 paired-tests that the Urban Institute and its subcontractor testing organizations have completed since 2011. At the outset, informed in part by the experience of the 2005 disability pilot study, the project team anticipated that the most complicated operational challenges would fall into three main categories: (1) the recruitment and retention of testers, (2) the availability of reliable transportation, and (3) the risk of detection by housing providers. All three are factors in testing projects of any size, particularly those including in-person site visits; without capable, credible testers who have access to transportation, any study is doomed to failure. When a project's tester pool includes many people who use wheelchairs, however, completing a testing study while avoiding detection by the housing industry can be particularly complex.

#### The Recruitment and Retention of Testers

As with previous HDSs, HDS-Disabilities project staff expended considerable effort recruiting capable and committed testers who could be matched on sex, race or ethnicity, and age to compose suitable tester pairs. Local organizations worked to achieve specific targets for racial and ethnic groups based on metropolitan area census data provided by the Urban Institute. As with previous HDSs, the recruitment of Hispanic and Asian-American testers proved difficult; local project staff and the team based at the Urban Institute connected with Hispanic and Asian-American community groups and national umbrella organizations to try to increase the diversity of the tester pool. Ultimately, more than one-half of HDS-Disabilities testers were White (55 percent among testers in wheelchairs and 57 percent among control testers), one-fourth were Black (25 and 23 percent, respectively), and 16 percent of both testers in wheelchairs and control testers were Hispanic (Levy et al., 2014).

Even fair housing organizations with robust testing programs needed to recruit additional testers both testers with disabilities and their tester matches—before the start of data collection. Many organizations expanded their typical tester recruitment efforts, forging new relationships with disability organizations, advocacy groups, and sports teams, such as wheelchair basketball and water polo. Even though the study's testing organizations were successful in reaching their overall recruitment goals, groups faced significant difficulties retaining testers. In previous studies, sites were affected by chronic underemployment of testers; when testers were offered permanent employment, they left their short-term, part-time jobs as testers. This reality continued to prove true for the control testers on HDS-Disabilities. For the testers with disabilities, however, their ability to remain on the project was affected less by the lure of other employment than by two other distinct factors. First, many testers with disabilities receiving financial assistance through state or federal programs had to adhere to limits on the amount of additional income they could earn without having their benefits reduced for subsequent years. As a result, many testers had a strict, maximum number of test assignments they could accept, and, after they reached that limit, they left the project. Second, many of the testers who used wheelchairs had ongoing healthcare needs, which affected both their availability and their capacity to conduct site visits. During the course of data collection, a number of tester attrition, the project sites were forced to continue to recruit and train new testers throughout the duration of the study, which required considerable staff time.

#### The Availability of Reliable Transportation

Before the start of testing, the project team assessed the availability of transportation options for testers in wheelchairs in each of the study's 30 sites and found tremendous differences in the availability and cost of public and private transportation options. In many sites, public paratransit services were deemed too unreliable to be used. Even in cities where wheelchair accessible transportation options were more readily available, many services required testers to allocate additional transit time to ensure they would arrive on time for appointments with housing providers; if testers arrived too early or too late, indications of differential treatment might be attributed to the timeliness of the tester rather than the housing provider's behavior. In some sites, testers had lengthy wait times for drivers taking them to site visits, which were exacerbated during inclement weather. During HDS-Disabilities testing, extreme weather events (for example, heavy snow, ice storms, extreme cold, and flooding) slowed or halted testing temporarily in 18 of the 30 project sites. Some testers used their own vehicles, which they or personal aides drove, but encountered problems finding places to park when they reached their appointments. At apartment complexes with parking lots, some testers described that golf carts (used by agents to tour the facilities with prospective tenants) were parked in accessible spaces. Even when they did not block the spaces entirely, the presence of the carts affected the ability of testers to exit their vehicles with their wheelchairs. Although previous HDSs required testers to travel the same relative distances-testers could receive assignments sending them anywhere within the metropolitan area<sup>13</sup>—the transportation challenges that testers with mobility disabilities faced ultimately were tackled, site by site, with strategic, advance planning and with the extraordinary patience and perseverance of the testers.

#### The Risk of Detection by Housing Providers

One of the most significant challenges the project team faced was avoiding detection by landlords while completing the required number of paired tests in each study site.<sup>14</sup> Because a sudden influx

<sup>&</sup>lt;sup>13</sup> Metropolitan statistical area definitions were used to determine geographic boundaries for study sites.

<sup>&</sup>lt;sup>14</sup> Households that include a person with a mobility disability—defined as having serious difficulty walking or climbing stairs—represent less than 5 percent of the total metropolitan renter population—about 1 in 21 renter households (2010 American Community Survey [ACS] Public Use Microdata analysis; Levy et al., 2014).

of renters in wheelchairs within a small metropolitan area could be particularly conspicuous, the project team decided that the sampling frame for study sites be restricted to areas with a minimum population threshold of 450,000 (Levy et al., 2014). The Urban Institute field team implemented specific procedures to minimize the inherent disclosure risk. Local project staff used detailed tracking logs to ensure no single property was tested more than once for the study. In metropolitan areas with limited availability of eligible properties (that is, housing that could be entered by people using wheelchairs), local organizations could assign a subsequent test to a previously tested property if a sufficient period of time (typically no less than a period of several months) had elapsed from the date of the first site visit. Project staff based at the Urban Institute authorized such assignments on a case-by-case basis. In addition, local testing organizations worked to maintain a steady but moderate testing pace from week to week, which enabled them to keep careful watch on where testers had been previously while also avoiding large surges of site visits in a concentrated period.

As with previous HDSs, the Urban Institute field team used careful oversight and regular communication to anticipate operational challenges and correct problems as they developed in the study sites. By maintaining daily contact with test coordinators and monitoring incoming data (submitted via an online data collection system), regional coordinators at the Urban Institute provided timely feedback to sites and helped ensure tester adherence to reporting requirements. The structure of the project team enabled the team at the Urban Institute to facilitate the sharing of best practices from the field in tester recruitment and retention, test coordination, and project management among the many local testing organizations, all of which helped the team overcome the study's toughest hurdles.

## **Key Study Findings**

The key findings of HDS-Disabilities, which are briefly summarized in this section, highlight the incidence and forms of differential treatment experienced by homeseekers who are deaf or hard and hearing and by homeseekers who use wheelchairs.

#### Discrimination Against Homeseekers Who Are Deaf or Hard of Hearing

The deaf and hard of hearing study of HDS-Disabilities included 1,665 tests, which were conducted remotely via telephone or the Internet in 168 metropolitan areas that account for more than four-fifths (82 percent) of the renter population that is deaf or hard of hearing (Levy et al., 2014).<sup>15</sup> Three local testing organizations were responsible for coordinating tests, and the tester pool was composed of people who are deaf and those who are hard of hearing. Testers who are deaf or hard of hearing contacted housing providers by using one of three commonly used TRSs, and hearing testers used the telephone to make contact with housing providers. Testers inquired about available rental housing, including rent costs and terms, and requested an appointment to meet in person but then cancelled more than an hour before the meeting time. Deaf and hard of hearing testers did not request any reasonable accommodations or modifications.

HDS-Disabilities found that housing providers are less likely to communicate with homeseekers who are deaf or hard of hearing and also tell those homeseekers about fewer available units (Levy

<sup>&</sup>lt;sup>15</sup> The data were drawn from the ACS, which asks if a person is deaf or has serious difficulty hearing.

et al., 2014). Hearing testers successfully reach an agent in 95.8 percent of tests compared with 90.7 percent for deaf and hard of hearing testers, a statistically significant difference of 5.1 percentage points. In one specific example, a deaf tester contacted the housing provider via VRS. After the CA explained the call was from a deaf person, the provider said that she did not take those kinds of calls, apologized, and hung up. On another test, a deaf tester used the IP CTS to make contact with the housing provider. He informed the housing provider that he was deaf before asking about the advertised apartment, but the provider said she was too busy but could e-mail the tester later.

When both testers of a pair do reach a housing provider, testers who are deaf or hard of hearing are 2.3 percentage points less likely to be told about any available units. When the housing providers' willingness to communicate with a homeseeker was combined with the availability of units, the study found housing providers tell deaf and hard of hearing testers about 0.14 fewer housing units per inquiry than they do hearing testers. In other words, for every seven attempts to find out about available rental housing, a homeseeker who is deaf or hard of hearing learns about one fewer available units than a comparable hearing homeseeker (Levy et al., 2014). In addition, housing providers who are willing to communicate with testers who are deaf or hard of hearing were found to be equally likely to schedule an appointment with both testers in a pair. Overall, deaf and hard of hearing testers were provided with the same average yearly net cost of units by housing providers, regardless of their disability status.

#### **Discrimination Against Homeseekers Who Use Wheelchairs**

The wheelchair component of HDS-Disabilities included 1,265 tests conducted in 30 metropolitan areas that represented nearly three-fourths (73 percent) of the population that has a mobility disability and resides in rental housing (Levy et al., 2014).<sup>16</sup> After testers were given assignments, they contacted housing providers by telephone and made requests for appointments; those who were able to secure an appointment conducted in-person visits. Testers inquired about available housing for rent, including rent costs and terms, and testers who use wheelchairs made requests for up to three reasonable modifications but did not request any reasonable accommodations.

When renters who use wheelchairs inquire about advertised housing that appears to be accessible, they are treated less favorably on several key indicators than equally qualified renters who are ambulatory (Levy et al., 2014). Housing providers are 1.7 percentage points less likely to make an appointment with homeseekers who use wheelchairs than with control testers. When both testers of a pair are able to meet with a provider and a suitable unit is available, users of wheelchairs are 2.4 percentage points less likely to be told about any available units. When housing providers tell both testers about available units and where units can be inspected by a person who uses a wheelchair, providers are 3.1 percentage points less likely to show any units to those who use wheelchairs. For example, in one test, the housing provider showed apartment floor plans to the tester who uses a wheelchair. When the tester asked to view an available apartment, the housing provider said it could not be shown because it was occupied. The housing provider did show an apartment to the control tester, however, and the control tester noted that the apartment was

<sup>&</sup>lt;sup>16</sup> These data are drawn from the ACS, which asks if a person has serious difficulty walking or climbing stairs.

accessible. The findings indicated no statistically significant difference between average yearly net costs for people who use wheelchairs and for people who do not. Further, no factor consistently contributes to variations in treatment of testers using wheelchairs.

Housing providers were 33.7 percentage points more likely to make comments about housing accessibility, 6.1 percentage points more likely to make comments about people with disabilities, and 4.8 percentage points more likely to make comments about fair housing to a homeseeker who uses a wheelchair than they were to a homeseeker who does not use a wheelchair (Levy et al., 2014). Most housing providers' comments documented by testers tended to be neutral, informative, or helpful. For example, agents told testers that other renters in the building used a wheelchair, mentioned that a loved one used a wheelchair so they understood accessibility needs, or pointed out a unit with a wheelchair ramp at the entrance. Other housing providers' comments and actions, however, were negative. One agent told a tester, "Oh, you're disabled ... you don't work." Another agent said that she thought the tester would be able to get out of the wheelchair to enter the building. One tester wrote in the test narrative that a housing provider said he had "never seen any disabled people for the building so this is new for him, especially someone who is severely disabled as I appear to be" (Levy et al., 2014: 50).

HDS-Disabilities also found that, on average, one-half of all advertisements for privately owned rental housing in the 30 study sites appeared to lead to units accessible by people who use wheel-chairs (Levy et al., 2014). Overall, only 44 percent of advertisements for rental units randomly selected for paired testing led to units identified as accessible. As previously noted in this article, however, because HDS-Disabilities used an operational standard of accessibility and not one equivalent to specific laws or design and construction standards, the report urges caution in the interpretation of this measure. The study did not conduct a formal survey of the rental housing stock, and the rates of accessibility do vary considerably across the 30 metropolitan areas included in the study, from a low of 11 percent to a high of 87 percent. Sites with a higher proportion of rental units in multifamily buildings constructed after 1990 have higher rates of accessible units.

#### Limitations

Although the power of the paired-testing methodology is undeniable because of the direct observations it provides of differences in treatment, it does have limitations. As in the previous HUDfunded studies, HDS-Disabilities provides information on the inquiry and information-gathering stages of the homeseeking process but does not capture all the differential treatment a tester might experience as a renter (Levy et al., 2014). The study does not reveal the outcomes a homeseeker might have later in the process, such as during the application phase or lease signing. Pairedtesting also would be difficult to use in the post-occupancy phase to learn more about the experience of residents; because a housing provider is already aware of tenants' financial and household characteristics, the challenge of forming appropriately matched pairs could prove insurmountable. Further, because HDS-Disabilities testers were assigned incomes that made them well qualified for the housing about which they inquired, the results may not reflect the incidence of discrimination that more marginally qualified disabled homeseekers with higher rent burdens might experience.

## **Further Directions**

The findings of HDS-Disabilities strongly suggest that important next steps should be taken along three categories: (1) future research, including future testing studies; (2) housing provider education and outreach; and (3) action, including the improvement of TRS technologies and the increase of the accessible rental housing stock.

#### **Future Research**

Future paired-testing studies are needed to provide additional evidence on the experience of people across the spectrum of disability and to produce estimates of housing structures that are in compliance with the design and construction requirements. Future testing studies could highlight the following—

- Treatment of more marginally qualified homeseekers with disabilities. As with previous HDSs, testers participating in HDS-Disabilities were assigned household incomes that made them well qualified for the housing about which they inquired. Although testers were rarely asked about their income by housing providers, they were commonly asked about the maximum rent they were willing to pay, which always was higher than the rent of the unit about which they inquired. For example, even if a tester began a test inquiring about a one-bedroom apartment, they were provided sufficient income to consider larger available units. As a result, the maximum rent a tester provided signaled to the housing provider how much more they could afford to spend overall, which gave some indication of a tester's financial capacity. In addition, if the agent raised the subject of credit standing, testers were able to volunteer they had excellent credit. The topic frequently arose during discussions about the security deposit when an agent might indicate that the cost was dependent on one's credit score. Taken together, these indicators may have helped convey the strength of the testers' financial qualifications. Without subsequent testing, it cannot be known definitely if (and to what extent) people with disabilities who are less well qualified (for example, lower income or blemished or no credit) or who receive public assistance (for example, Supplemental Security Income or Social Security Disability Insurance) would experience treatment comparable to more highly qualified homeseekers.
- Treatment of homeseekers who are deaf or hard of hearing during in-person visits. Because the tests that were conducted for the deaf and hard of hearing component of the study were done remotely, and because most comments that housing providers made expressed concern about the ability to communicate with the homeseekers, a future testing study could include in-person site visits to examine how the treatment of testers might vary during face-to-face meetings with housing providers. In addition, the study could include requests for modifications, such as the installation of flashing lights for the doorbell, which were not included as part of the HDS-Disabilities remote testing effort.
- Treatment of homeseekers who are blind or visually impaired. As the exploratory component of the 2005 disabilities pilot study demonstrated, the paired-testing methodology can be used to examine the level of differential treatment against people who are blind or visually impaired. A future study also could focus on housing providers' willingness to make

reasonable accommodations for people using assistance animals. Given the extent to which testers in the pilot study had difficulty finding front doors, using intercoms or buzzer systems, or accessing offices or properties, the testing protocol would need to outline whether aides would be needed to help testers with transportation and with gaining entry to the housing.

• The compliance of housing with the Fair Housing Act design and construction standards. Although HDS-Disabilities did not produce national estimates of accessibility among rental units, the number of wheelchair-accessible units identified in the study sites may indicate a problem requiring additional attention. A future study could use a carefully defined population of housing structures from which to draw a representative sample of units covered by the Fair Housing Act's design and construction requirements for housing first occupied after March 13, 1991. The study could be carried out by single testers (instead of pairs) trained to conduct design and construction assessments and could produce regional or national estimates.

Additional research methods may shed light on the experience of in-place tenants with disabilities. For example, tenant surveys could provide information on modification requests made before lease signing or subsequent to occupancy. Although HDS-Disabilities found that more than 70 percent of modification requests were approved, without conducting subsequent tenant surveys, the amount of time that tenants waited for official approval or implementation of the requested modifications and the ultimate cost of making specific modifications cannot be known. In addition, because HDS-Disabilities found differences in the willingness of housing providers to communicate with deaf or hard of hearing testers based on the type of TRS used, more details should be known about the users of each TRS type, such as demographic and socioeconomic characteristics and whether those who are deaf and hard of hearing face barriers in accessing particular TRS types.

#### **Housing Provider Education and Outreach**

The findings of HDS-Disabilities also strongly point to the need for ongoing housing-provider education and outreach. First, housing providers must be trained on the Fair Housing Act and other laws, such as the Americans with Disabilities Act, prohibiting discrimination against people with disabilities. The comments that housing providers made about housing accessibility and modification requests suggest that some landlords and property managers do not understand their legal obligations. Second, housing providers should increase their awareness of the accessibility of their properties and the internal procedures for requesting and approving reasonable modification requests. When a tester asked over the telephone or during e-mail contact whether a property was wheelchair accessible, a number of housing providers did not know. Providers also could not (or did not) always respond to testers' requests for permission to make reasonable modifications to lobby areas or apartment interiors.

#### Action

Finally, the findings of the study suggest that action is needed on three important fronts. First, public and private fair housing organizations should continue to aggressively pursue complaint-based and systemic testing investigations. Without ongoing monitoring and enforcement, discriminatory housing provider patterns and practices may persist in communities across the country and new forms of differential treatment may be allowed to extend their reach. The resources allocated to

testing programs also should reflect the diverse needs and demographics (for example, ethnic and racial minorities, immigrants, and seniors) of the disability community in any jurisdiction. Second, improvements to TRS technologies are needed. Study findings show that housing providers contacted by people using VRS technology were more likely to communicate with the caller than with those using the other TRSs. Compared with the two other technologies used in HDS-Disabilities, VRS supports a smoother and quicker pace of communication between a person who is deaf and a person who is hearing. Use of VRS relies on a person's ability to communicate in sign language, however, so this technology is not an option for everyone who needs to use a TRS. Improvements in communication technologies could improve the housing search, and possibly the outcomes, for people who begin their housing search remotely. Finally, the stock of accessible rental housing must increase. Discrimination-based impediments to housing access, along with inaccessible housing stock and population trends, likely will increase the need for accessible housing in cities across the United States. Findings from this study show that people who use wheelchairs face reduced housing options compared with people who are ambulatory. As the U.S. population trends older and rates of disability increase, competition could increase among renters for accessible apartments and homes. Increasing pressures on housing stock could be particularly strong in markets where a predominance of housing was built for first occupancy before March 13, 1991, when the Fair Housing Act's design and construction requirements went into effect. Housing policy and industry professionals in cities with an older housing stock and aging resident populations should consider how to meet an increased demand for accessible units.

## Conclusion

Because HDS-Disabilities is the first paired-testing study to produce national estimates of rental housing discrimination against people who are deaf or hard of hearing and people who use wheel-chairs, the evidence it provides can serve as a useful benchmark for policymakers and practitioners alike as they address the discriminatory treatment of people with disabilities. These findings also may help practitioners assess the magnitude of barriers to accessible housing as an aging population further increases the demand, particularly in communities with an older housing stock. In addition, the lessons learned by the study's field implementation team may also be helpful to local testing organizations in communities across the country as they conduct disability-based testing. Future paired-testing studies are needed to help measure change in the forms and incidence of discrimination over time and to provide estimates on differential treatment against varying subgroups of people with disabilities.

## Acknowledgments

HDS-Disabilities could not have been achieved without the extraordinary dedication and talent of field staff based at local organizations across the country, including disability advocacy groups, centers for independent living, and fair housing organizations. The perseverance of testers, including those who traveled significant distances (sometimes to other cities and states) to help conduct tests, provided an inspiring example for the entire project team based at the Urban Institute and led by Diane K. Levy, Margery A. Turner, Rob Santos, Doug Wissoker, Rob Pitingolo, Helen Ho, and Dave

D'Orio. Tremendous credit is also due to the regional coordinators who ensured each test met the highest standards: Jim Crawford, Lainie Dulaney, Laura Loessner, Thu Nguyen, Max Pollock, and Sarale Sewell.

#### Author

Claudia L. Aranda is a senior research associate in the Metropolitan Housing and Communities Policy Center at the Urban Institute.

#### References

Hoffman, Denise W., and Gina A. Livermore. 2012. "The House Next Door: A Comparison of Residences by Disability Status Using New Measures in the American Housing Survey," *Cityscape* 14 (1): 5–33.

Jacobsen, Linda A., Mary Kent, Marlene Lee, and Mark Mather. 2011. "America's Aging Population," *Population Reference Bureau* 66 (1): 1–16.

Joint Center for Housing Studies (JCHS) of Harvard University. 2014. *Housing America's Older Adults—Meeting the Needs of an Aging Population*. Cambridge, MA: Joint Center for Housing Studies of Harvard University.

Levy, Diane K., Margery Austin Turner, Rob Santos, Doug Wissoker, Claudia L. Aranda, Rob Pitingolo, and Helen Ho. 2014. *Discrimination in the Rental Housing Market Against People Who Are Deaf and People Who Use Wheelchairs: National Study Findings*. Washington, DC: U.S. Department of Housing and Urban Development.

National Council on Disability. 2010. *State of Housing in America in the 21st Century: A Disability Perspective*. Washington, DC: National Council on Disability.

National Fair Housing Alliance (NFHA). 2014. 2014 Fair Housing Trends Report. Washington, DC: National Fair Housing Alliance.

Nelson, Kathryn. 2008. The Hidden Housing Crisis: Worst Case Housing Needs Among Adults With Disabilities. Washington, DC: Consortium for Citizens With Disabilities Task Force.

Rolka Loube Saltzer Associates. 2014. "Interstate TRS Fund Performance Status Report: August 2014." http://media.wix.com/ugd/455e4d\_88b979484cb24c14a934ba343bb812a2.pdf.

———. 2012. "Interstate TRS Fund Performance Status Report: Funding Year July 2012–June 2013." http://media.wix.com/ugd/455e4d\_ba61f9b0649f4357945bd3b7679a1318.pdf.

She, Peiyun, and Gina A. Livermore. 2009. "Long-Term Poverty and Disability Among Working-Age Adults," *Journal of Disability Policy Studies* 19 (4): 244–256.

Smith, Stanley K., Stefan Rayer, and Eleanor A. Smith. 2008. "Aging and Disability: Implications for the Housing Industry and Public Policy in the United States," *Journal of American Planning Association* 74 (93): 289–306.

Smith, Stanley K., Stefan Rayer, Eleanor A. Smith, Zhenglian Wang, and Yi Zeng. 2012. "Population Aging, Disability and Housing Accessibility: Implications for Sub-National Areas in the United States," *Housing Studies* 27 (2): 252–266.

Turner, Margery Austin, Carla Herbig, Deborah Kaye, Julie Fenderson, and Diane K. Levy. 2005. *Discrimination Against Persons With Disabilities: Barriers at Every Step.* Washington, DC: U.S. Department of Housing and Urban Development.

Turner, Margery Austin, Rob Santos, Diane K. Levy, Doug Wissoker, Claudia L. Aranda, and Rob Pitingolo. 2013. *Housing Discrimination Against Racial and Ethnic Minorities 2012*. Washington, DC: U.S. Department of Housing and Urban Development.

### Additional Reading

Turner, Margery Austin, and Stephen Ross. 2003. *Discrimination Against African Americans and Hispanics: Supplemental Results From Phase II of HDS2000*. Washington, DC: U.S. Department of Housing and Urban Development.

Turner, Margery Austin, Ray J. Struyk, and John Yinger. 1991. *Housing Discrimination Study Synthesis*. Washington, DC: U.S. Department of Housing and Urban Development.

Wienk, Ronald E., Clifford E. Reid, John C. Simonson, and Frederick J. Eggers. 1979. *Measuring Discrimination in American Housing Markets: The Housing Market Practices Survey*. Washington, DC: U.S. Department of Housing and Urban Development.