



# PD&R: A HISTORICAL INVESTIGATION AT (ALMOST) 50

A HUD 50<sup>TH</sup> ANNIVERSARY PUBLICATION



PD&R



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# Introduction

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The U.S. Department of Housing and Urban Development (HUD) was created as a cabinet-level agency 50 years ago, combining within its oversight various existing federal programs such as public housing and urban renewal. Some of the individual programs were already running research demonstrations when HUD began, but the agency did not immediately have an office devoted to coordinated research and analysis about the need for, and impacts of, different federal interventions to improve the state of housing and communities in the nation. Within 4 years of HUD's birth, however, the first subcabinet-level research office was created, which became what is now known as the Office of Policy Development and Research (PD&R).

Many stories could be told about the history of PD&R. This one takes a case-specific approach, focusing on shifts over time between PD&R's study of ways to produce a decent home for all American families, on the one hand, and ways

to ensure that the most needy families can afford a decent home in a suitable environment. The shifts show that federal policy priorities, filtering down from Congress and the White House, directed, nudged, or constrained PD&R's work. Notwithstanding this buffeting, PD&R's history shows the buildup of a significant housing-related data infrastructure, a store of publicly available housing-related social science evidence, and a federal research office that both feeds and benefits from a wider community of academics, research institutions and foundations, and other federal agencies.

This story begins with a national urban crisis that brought to light the need for research and policy recommendations about how the federal government can help provide decent living environments for American households, particularly for those that cannot afford or are excluded from them.

# The Late 1960s: Urban Crisis and Research by Advisory Commission

The postwar Atomic Age of technological exuberance met up with the socioeconomic “crisis of the cities” in the mid-1960s. Cities saw a large in-migration of Black residents from the rural south and a concomitant out-migration of White residents to exclusionary suburban communities, and with them significant out-migration of commercial and mercantile employment opportunities. The federal Urban Renewal program, authorized in 1954, was meant to eradicate urban slums with their substandard housing. A decade into it, impoverished urban areas persisted. From 1964 through 1968, cities in the United States experienced hundreds of race riots. In the midst of this turmoil, the Department of Housing and Urban Development Act in 1965 established HUD.<sup>1</sup>

Congress emphasized the sense of crisis in its statement of findings for the Demonstration Cities and Metropolitan Development Act of 1966:

**The Congress hereby finds and declares that improving the quality of urban life is the most critical domestic problem facing the United States. The persistence of widespread urban slums and blight, the concentration of persons of low- income in older urban areas, and the unmet needs for additional housing and community facilities and services arising from rapid expansion of our urban population have resulted in a marked deterioration in the quality of the environment and the lives of large numbers of our people while the Nation as a whole prospers.<sup>2</sup>**

In 1967, President Lyndon Johnson created three advisory committees to study the situation. All three reported out in 1968.

The National Advisory Commission on Civil Disorders was formed immediately after the July 1967 riots and informally known as the Kerner Commission after its chairperson,

Otto Kerner. It was tasked with discovering the source of the urban riots. The President’s Committee on Urban Housing, better known as the Kaiser Commission after its chairperson, industrial shipbuilder Edgar Kaiser, was tasked with investigating ways to supply “a decent home and healthy surroundings for every American family now imprisoned in the squalor of the slums” (PCUH, 1968: 1). The third advisory committee was the National Commission on Urban Problems, known as the Douglas Commission after its chairperson, Paul H. Douglas, a former Senator from Illinois and self-described “early proponent of civil rights legislation” (NCUP, 1968: 501). President Johnson formed this committee pursuant to authority he had requested in 1965, which Congress granted, to study building and housing codes, zoning, local and federal tax policies, and development standards to provide, in Johnson’s words, “knowledge that would be useful in dealing with slums, urban growth, sprawl and blight, and to insure decent and durable housing” (NCUP, 1968: vii). The Douglas Commission was specifically to recommend ways to combine efforts of the federal government, private industry, and local communities to increase the supply of low-cost, decent housing (NCUP, 1968).


The Kerner Commission reported that the riots stemmed from pervasive racial discrimination and segregation resulting in economic, social, and political impoverishment in inner-city ghettos and in frustration with the contrast between these conditions and hopes spurred by judicial and legislative victories of the Civil Rights Movement. The Commission also cited media reflections of expanding national prosperity. Inadequate housing was one of the conditions complained of (NACCD, n.d. [1968]).<sup>3</sup> Focusing on urban housing, the Kaiser Commission had a significant hand in developing what would be the Housing and Urban Development Act of 1968 (hereafter, the 1968 Act).<sup>4</sup> It recommended putting what President Johnson referred to

<sup>1</sup>Pub. L. 89–174, 79 Stat. 667 (Sept. 9, 1965), codified as 42 U.S.C. §§ 3532–3537.

<sup>2</sup>Sec. 101, Pub. L. 89–754, 80 Stat. 1255 (Nov. 3, 1966).

<sup>3</sup>Documents referenced in the form “n.d. [YYYY]” indicate that the document has no publication date, but the author imputed the approximate year of publication from the context of the document.

<sup>4</sup>Pub. L. 90–448, 82 Stat. 476 (Aug. 1, 1968).



as the “genius of industry” to work in dramatically increasing housing production (von Hoffman, 2010). The Douglas Commission’s expansive view of its task resulted in a review of housing policy generally rather than simply codes and tax policies. One of its recommendations urged the President and Congress to expand federal data collection about housing and other urban problems, specifying that HUD’s research activities should “be vastly expanded, with special reference to housing programs for the poor and near-poor” in order “to close serious information gaps that now exist with regard to many aspects of public policy and effective government for urban areas” (NCUP, n.d. [1968]: 184).

The 1968 Act reflected the Kaiser report’s recommendations and included a numerical goal of producing, within the next 10 years, 20 million homes plus 6 million affordable units for low-income families. Section 108 of the 1968 Act also required HUD to promote and support, as much as feasible, the use of technological innovations in its work. The same technology provision was repeated in Title V of the Housing and Urban Development Act of 1970 (hereafter, the 1970 Act), when Congress replaced various different housing and urban development research authorities into one general provision granting HUD broad authority to engage in research and demonstrations relevant to HUD’s mission.<sup>5</sup>

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<sup>5</sup>Housing and Urban Development Act of 1970, Title V, §§ 501–504, Pub. L. 91–609, 84 Stat. 1784–1786 (December 31, 1970).



# The Beginnings of PD&R

When HUD was created in 1965, federal research, development, and demonstration activities relating to housing, metropolitan growth, and urban problems were relatively small, disparate projects initiated in response to unsolicited proposals under individual HUD program offices. These projects included demonstration programs on low-income housing, urban planning, and “urban renewal” and research on transportation<sup>6</sup> and federal assistance in response to natural disasters (HUD, n.d. [1968]: 24). In 1966, HUD created a number of advisory committees of outside experts to evaluate those program areas (HUD, n.d. [1967]).

In 1967, HUD’s first Secretary, Robert Weaver, created two divisions within the Office of the Secretary that would eventually merge into the present-day PD&R (NRC, 2008). The two divisions were an office for policy analysis and program evaluation, and a research and development (R&D) office. The latter, the Office of Urban Technology and Research, was established “to create a coordinated and comprehensive research effort, and to lay a sound foundation for its necessary future enlargement.” It assumed responsibility for all but the most closely program-oriented of HUD’s R&D programs. It began with a director, a budget of \$500,000, and a total staff of 32 (HUD, n.d. [1968]: 24–25). In 1968, HUD’s R&D office awarded the newly formed Urban Institute its first contract to study urban problems as a whole (HUD, n.d. [1968]). From 1967 to 1969, the title of the R&D office switched from “Urban Technology and Research” to “Urban Research and Technology,” and then to simply “Research and Technology” (HUD, n.d. [1969]: 385; HUD, n.d. [1970]: 259).

Also in 1967, HUD commissioned a study and report by the National Research Council of the National Academies of Sciences and Engineering (NRC) on recommendations for “long-range planning for R&D” at HUD. NRC reported its results in 1969. Based on questions that HUD gave NRC to guide the goals of its recommendations, the NRC

report was split into one part focused on “technological considerations,” or the role of industry in housing R&D, and a second part focused on strategic use of “social and behavioral science” to address urban problems. The NRC report reflected two strategies for HUD R&D: low-cost housing production and social intervention.

NRC’s specific research recommendations included “a major shift in emphasis from the traditional ‘bricks and mortar’ approach to urban research and development to a systematic concern with the people, their condition, institutions, and social change” (NRC, 1969: 26). It went on to explain its premise for the shift in emphasis. It did not accept “the assumption that improvements in housing and physical services have an automatic and beneficial multiplier effect on the human conditions of the cities. ... urban processes may be more effectively studied and altered when viewed in their human and institutional dimensions” (NRC, 1969: 26).

NRC recognized that HUD was simultaneously receiving advice on its R&D program from various other sources. In addition to the Douglas Commission’s review of the state of knowledge on zoning, housing and building codes, taxation, and development standards, the RAND Corporation had already fulfilled a contract for “Recommendations for Research in Support of Federal Urban Programs” in April 1968. NRC also took it for granted that HUD was monitoring similar relevant ongoing activities such as the President’s Task Force on Communications Policy, which explored urban impacts of such innovations as “facsimile mail, electronic communications, computerized money and credit systems, home consoles for access to education and information reference banks [presumably precursors to the personal computer and the Internet], and TV surveillance for traffic and public order and safety” (NRC, 1969: 24).

On the technology side, the basic strategy outlined by NRC emphasized using social science research to guide technological efforts. NRC recommended that HUD focus on ways to use currently available technology (such as improvements in factory-produced housing), and only secondarily on pursuing research opportunities in new technology (NRC, 1969).

<sup>6</sup>When HUD was first established, it had responsibility for administering federal programs for urban mass transportation. In the Reorganization Plan No. 2 of 1968, President Johnson transferred the responsibility to the U.S. Department of Transportation (33 Fed. Reg. 6965, 6865–6866 [May 9, 1968]).

On the social and behavioral sciences side, NRC recommended that HUD develop its research manpower and capabilities to keep up with the growth of related nonfederal R&D. According to NRC, HUD should develop means to tap into an “extramural network” of social and behavioral science research conducted by universities, nonprofits, municipal governments, private industry, and inhouse. HUD should thus allocate (1) “a substantive share” of HUD’s R&D budget to developing a network of extramural R&D capabilities, “including the required supplies of scientific and professional manpower”; (2) “a significant portion” to program evaluation; and (3) an “adequate provision” for short-run research to analyze for policy purposes the data generated by larger research efforts (NRC, 1969: 88). The basic premise of NRC’s report was that the nation suffered from a significant lack of social science research on housing and urban problems. NRC’s advice, therefore, focused more on process than product: HUD should help build extramural research capacity with which HUD’s intramural R&D program could be networked.

HUD’s second (official)<sup>7</sup> Secretary, George Romney, took office in January 1969, and by May of that year had raised the R&D office to the subcabinet level as the Office of the Assistant Secretary for Research and Technology (HUD, n.d. [1971]: 281). It would not be until 1973, when newly appointed Secretary James Lynn merged research and technology with the policy and program evaluation functions in the Secretary’s office, that PD&R took on its current form as the Office of the Assistant Secretary for Policy Development and Research. The merger shifted the weight of expertise in HUD’s research office from technology to social science. The Assistant Secretary of Research and Technology was an engineer from NASA (the National Aeronautics and Space Administration). The Assistant Secretary of PD&R after the merger was an economist, as were many of the staff members who joined the office from the preceding policy and program evaluation division (NRC, 2008: 13).

Before the merger, HUD’s research office undertook a large demonstration project to test a strategy of increasing the housing industry’s capacity for mass production of housing. Its first big project after the merger was a social experiment to provide housing allowance payments to households living in substandard or overpriced housing.

What follows is an historical investigation into shifts in PD&R’s research agenda along these axes as it was buffeted by political agendas and budgetary resources through the next 40 or so years and how, notwithstanding these headwinds, its production and support of evidence-based social science data and research evolved.

<sup>7</sup> HUD’s first Secretary, Robert Weaver, left office in December 1968. George Romney took office in January 1969. Between the two, Weaver’s Under Secretary, Robert C. Wood, served as Secretary with a recess appointment from President Johnson. The Senate never acted on Wood’s nomination, however, and he was never sworn in as Secretary.

# From Technological Research and Development to Social Experimentation and Back Again, and Again

The national housing goal declared by Congress in 1949, and emphatically reaffirmed in the 1968 Act, is “a decent home and a suitable living environment for every American family.”<sup>8</sup> This phrase broadly encompasses HUD’s mission: to work toward not only a decent dwelling unit for all, but also a local living environment that is suitable.<sup>9</sup> The beginnings of PD&R exemplify two distinct focuses for researching how to reach that goal. First, test ways to improve the production of houses; second, test ways to provide resources to needy families so that they may live in a decent dwelling.

Later, research on improving production would disaggregate into researching construction techniques and how to overcome regulatory barriers that drive up the cost of production. Research on providing resources to needy families would expand to include a suitable living environment or neighborhood as part and parcel of the access afforded to a decent dwelling.

## Operation BREAKTHROUGH

Elevation of HUD’s research office to the subcabinet level in 1969 coincided with its launch of an ambitious demonstration project, Operation BREAKTHROUGH, championed by Secretary Romney.

The 1968 Act had established HUD’s responsibility for ensuring the production of 26 million new homes in 10 years, 6 million of them for low- and moderate-income families.<sup>10</sup> The same act directed HUD to encourage the use of new technologies in the development of low-income housing. Although Congress had already directed HUD,

in 1966, to conduct studies and demonstrations on ways to apply innovative technologies to housing construction, rehabilitation, and maintenance and to urban development activities,<sup>11</sup> the 1968 Act went further and mandated that HUD undertake a specific demonstration program to test new technologies for low-income housing production. Section 108 of the 1968 Act called for HUD to solicit and approve no more than five plans by public or private entities to develop low-income housing “using new and advanced technologies ... where local building regulations permit the construction of experimental housing,” or where local zoning law permits variances for the construction of “experimental housing.” In addition to encouraging the use of new technology in low-income housing production, the demonstration was meant to “encourage large-scale experimentation in the use of such technologies,” provide for a comparison of the new and existing housing technologies, and evaluate the effect of local housing and zoning codes on the use of new housing technologies.<sup>12</sup>

When Secretary Romney took over administration of HUD in January 1969, the outgoing administration informed him that the Office of Urban Technology and Research had already initiated an experimental housing project to study how zoning, building codes, labor rules, and local financial and administrative policies constrain the rapid adoption of cost-saving housing production technologies. This project was called the “‘In-Cities’ Experimental Housing Project” (HUD, n.d. [1968]: 28). The outgoing administration also

<sup>8</sup> 1968 Act: 601.

<sup>9</sup> The Fair Housing Act, also enacted in 1968, made discrimination in housing illegal, which added to the meaning of *decent* homes in *suitable* environments, requiring they be free of discrimination.

<sup>10</sup> 1968 Act: 601.

<sup>11</sup> Demonstration Cities and Metropolitan Development Act of 1966, § 1010, Pub. L. 89–754, 80 Stat. 1286 (Nov. 3, 1966). Section 1011 of the statute also directed HUD to conduct research about “the ecological factors involved in urban living,” because Congress had found that, given the “influence of environment on all living creatures, ... much more knowledge is urgently needed concerning the effect on human beings of highly urbanized surroundings.” The record of HUD’s research undertakings of the time shows no significant research on ecological factors in urban living in response to this directive.

<sup>12</sup> 1968 Act, § 108: 495.

advised Romney that one of the most important matters requiring HUD attention in the R&D area was developing a major innovative housing demonstration “potentially ten times the size of the In-Cities experiment” in response to Section 108 of the 1968 Act (HUD, n.d. [1968]: 30–31).

Romney apparently took the advice, and had the newly elevated Office of Research and Technology initiate Operation BREAKTHROUGH to demonstrate and encourage the development of mass production techniques in residential construction, while breaking through other regulatory and market barriers to swift and low-cost housing production. HUD had high ambitions for the research demonstration, describing it in the 1971 HUD Statistical Yearbook as—

... a focusing activity for improving the entire housing process. Operation BREAKTHROUGH is a major HUD program to increase the overall productive capacity of the American housing industry, to identify and apply advances in building materials, production techniques, design, management marketing, financing methods, and site planning “to break through” the factors that have kept us from achieving our housing objectives. (HUD, n.d. [1972]: 293)

Included in the constraints on achieving housing goals were “a fragmented housing market, restrictive building and zoning codes, shortages and inefficient use of skilled labor, processing red tape, poor use of land, restrictive labor practices, inadequate management methods, and the absence of adequate short- and long-term financing” (HUD, n.d. [1972]: 293). The budget of what was then the Office of Research and Technology went primarily to this priority from 1969 through 1971.

Without much time to prepare a plan for testing how to “break through” local regulatory and market constraints (such as land use, zoning, taxes, and codes and labor, land, and building material markets) and traditional construction technologies, the program was outlined in May 1969 at meetings held by HUD with members of the building industry, labor unions, and state and local governments. The new Assistant Secretary for Research and Technology, Harold B. Finger, organized the initial meetings, and his successor, Assistant Secretary for Policy Development and Research Michael H. Moskow, assumed the responsibility on taking over (HUD, n.d. [1975]).

Operation BREAKTHROUGH produced nine prototype housing projects on sites nominated by local and state governments, representing urban, peripheral, suburban, and semirural neighborhoods. It built nearly 3,000 units between 1971 and 1973. Most units were occupied and in private ownership by 1975. Operation BREAKTHROUGH hit a funding crisis in fiscal year (FY) 1971, however, when Congress approved only \$30 million for HUD research and technology although President Nixon had requested \$55 million, of which \$35 million was to go to BREAKTHROUGH (HUD, n.d. [1975]).

The 1969-to-1972 initiative did not meet its overall objectives. The General Accounting Office (GAO; now the Government Accountability Office, a research arm of Congress), NRC, and others reviewed the results of the demonstration. GAO found fault with HUD’s lack of preparatory research; NRC found that the government did not have sufficient procurement interest to foster the new building technologies; and others found a lack of technical expertise and market experience at the root of Operation BREAKTHROUGH’s failure to catalyze mass production of affordable housing (GAO, 1976: 30; Martin, 2005: 7).

### **The Experimental Housing Allowance Program Evaluation of Proto-Housing Choice Voucher Program (Section 8 Existing Housing)**

The Office of Research and Technology’s second big demonstration project emphasized providing needy families the means to live in decent housing that already existed. Section 504 the 1970 Act authorized the demonstration as the Experimental Housing Allowance Program (EHAP). Such an experimental program was one of the recommendations of the Kaiser Commission report in 1968. Although it recommended use of housing allowances to meet the needs of low-income households, the Kaiser Commission was reluctant to recommend a full-scale program because it feared that allowances would cause housing inflation and would divert from an immediate need for new construction (PCUH, 1968: 71). Planning for the mandated demonstration study began in 1971, while Operation BREAKTHROUGH was still under way. Completing the design and startup of this demonstration did not become a priority, however, until James Lynn became Secretary of HUD in 1973 (Foote, 1995). Its final design represented the first major attempt to subject a housing program concept to systematic testing. It comprised three related experiments.

The “demand experiment” asked how a housing allowance payment would affect low-income families’ housing expenses, quality, and segregation. It included experimental and control groups of 3,600 low-income households in two cities (Pittsburgh, Pennsylvania, and Phoenix, Arizona). The experimental groups were offered cash allowances in varying amounts provided they lived in (or moved to) housing that, for one experimental group, met a minimum standard for health and safety or, for another group, met a minimum rent standard. The control group had no housing standard requirements and received no housing allowance payments, but it was given nominal compensation for filling out a monthly form and participating in periodic interviews (Shroder, 2000).

The “administrative agency experiment” tested public housing agencies’ administration of allowances by providing the housing agencies in eight jurisdictions (cities, counties, or rural areas in California, Florida, Illinois, Massachusetts, North Carolina, North Dakota, Oklahoma, and Oregon) with funds and authority to administer housing allowances for between 500 and 900 low-income households in each jurisdiction. Allowance payments for the demand and administrative agency experiments ran for 3 and 2 years, respectively (HUD, 1980).

The “supply experiment” asked how housing markets and neighborhoods respond. It provided all eligible families in two test locations (Green Bay, Wisconsin, and South Bend, Indiana) with an allowance of the difference between the HUD-determined Fair Market Rent (FMR) and 25 percent of income, provided the family lived in housing that met health and safety standards. Payments for the supply experiment ran until 1984 (a 10-year commitment) to better approximate the market effects of a longstanding subsidy program, but the evaluation phase ended after 5 years (HUD, 1980).

Altogether, the three prongs of EHAP were designed to answer various questions about the effects of a housing allowance such as: How many families will make use of the allowance payments? What kind of housing will they choose in terms of quality and price, and in what neighborhoods? How will the family allocate its housing allowance payment toward improved housing quality or reduced housing cost burden? How will housing markets respond to the demand created by additional purchasing power? How and at

what cost might an allowance program be administered? Including all three experimental prongs, EHAP involved more than 30,000 households in 12 locations nationwide and, according to an estimate by GAO, cost approximately \$153 million, including the housing allowance payments (HUD, 1980; GAO, 1983).

HUD submitted annual reports to Congress on the EHAP demonstration from 1973 through 1976 and in 1979. PD&R’s report on conclusions from the EHAP experiment noted that before EHAP, information about the housing conditions of low-income families was extremely crude (HUD, 1980). In addition, although PD&R had launched the statutorily mandated Annual Housing Survey (AHS; since renamed the American Housing Survey) in 1973, 2 years after EHAP was initiated, data gathered through the EHAP experiment contained more detailed information than the AHS on housing conditions of low-income families at the time. EHAP data showed that most income-eligible households in the test jurisdictions lived in substandard housing and most had high rent burdens. The 1980 report also concluded that the housing allowance did not significantly impact a household’s choice of neighborhood. Instead, ties to family and friends, neighborhoods, work places, and schools largely governed mobility and location of residence (HUD, 1980).

The data and analysis from the EHAP demonstration fed into information from PD&R’s evaluations of Section 8 subsidy programs—including the Section 8 Existing Housing Program, a prototype housing voucher program initiated by amendments to the Housing Act of 1937—while EHAP was ongoing (HUD, n.d. [1980]). Donna Shalala, Assistant Secretary for PD&R from 1977 to 1980, during the Carter Administration, recalled internal debate at HUD as to whether to follow through on the voucher study, because it was a “Republican program.” PD&R felt that it was the most important housing study in a generation and pursued the study. Shalala recounted that the findings showed a difference in effectiveness of the voucher program depending on particular characteristics of the low-income household served, such as whether it was an elderly household or a large family (Foote, 1995).

## Demonstrating Affordable Housing Construction Techniques (Again) and Testing a Voucher Concept

When President Reagan came to office in 1981, he created the President's Commission on Housing to recommend federal housing and mortgage finance interventions that would "strengthen the ability of the private sector to maximize opportunities for homeownership and provide adequate shelter for all Americans" and would reform current housing programs (HUD, 1983: 10–12). The commission recommended immediately replacing low-income housing production programs with a housing voucher program; deregulating housing production generally; having state and local government deregulate land use, zoning, building, and infrastructure standards that were excessively costly; and opening up the housing finance industry to additional private sources of mortgage credit (HUD, 1983). In keeping with these recommendations, a new "Affordable Housing Demonstration Program" was instituted at HUD to again research and encourage cost-saving methods for constructing affordable housing and, more specifically, to encourage public-private coalition building and local regulatory reform while compiling and disseminating best practices along these lines. The demonstration produced 32 projects in cities across the United States and a list of publications geared toward state and local governments and builders, with guidance on cost-saving methods in new housing construction (HUD, 1984).

The commission's emphasis on tenant-based housing vouchers was not overlooked. The first tenant-based subsidy program, Section 8 Existing Housing, had been created by the Housing and Community Development Act of 1974<sup>13</sup> and was known as the "certificate" program. The Housing and Urban-Rural Recovery Act of 1983<sup>14</sup> created, on a temporary basis, a similar tenant-based subsidy that had a different payment formula and was called the "voucher" program. The latter was made permanent by the Housing and Community Development Act of 1987.<sup>15</sup> The two programs would be merged into one by the Quality Housing and Work Responsibility Act of 1998,<sup>16</sup> also known as the Public Housing Reform Act.

While the two subsidy programs were operating side by side, PD&R undertook a study that randomly assigned eligible families to one or the other. This Freestanding Housing Voucher Demonstration was conducted from 1985 through 1988 and followed a sample of more than 12,000 families in 16 cities for 1 year (Shroder, 2000). Under the voucher payment formula, the government paid a fixed subsidy to bridge the gap between 30 percent of tenant income and the FMR for the area, and the tenant's rent contribution varied depending on the landlord's actual rental charge. Under the certificate payment formula, tenant contributions were a fixed percentage of income and the government's subsidy payment varied with the landlord's rental charge (up to a maximum reasonable rent for the area). A major finding was that both certificate and voucher holders tended to seek housing in a Section 8 submarket, which had more influence on landlord rents than did a voucher holder's interest in securing housing at a lower rent so as to have a smaller monthly contribution (Shroder, 2000).

## Further Housing Construction Studies: Affordable Housing Barriers to Innovative Building Technologies

Operation BREAKTHROUGH had sought to demonstrate ways to make housing production quicker and less costly through two rubrics—innovative construction methods and overcoming local market and regulatory barriers to low-cost housing construction—but it emphasized the former in its use of mass manufacturing techniques. The Affordable Housing Demonstration Program in the 1980s had focused on the latter. In 1990, a similar effort to study ways to make housing more affordable by reducing the costs of development and construction would also emphasize local barriers over technological innovation. In 1990, HUD Secretary Jack Kemp convened a commission on regulatory barriers to affordable housing production at the request of President George H.W. Bush. PD&R contributed staff to the effort, and HUD published the commission's final report in 1991. The task was to survey the problem of regulatory barriers (federal, state, and local land use; zoning; building and construction codes; and permitting processes and fees) and recommend ways to remedy the problem to make housing more affordable.

<sup>13</sup> 12 U.S.C. 1706e.

<sup>14</sup> Pub. L. 98–479, 98 Stat. 2218 (Oct. 17, 1984).

<sup>15</sup> Pub. L. 100–242, 101 Stat. 1815 (Feb. 5, 1988).

<sup>16</sup> Pub. L. 105–276, Title V (Oct. 21, 1998).

The final report (Advisory Commission, 1991) found that the cost of housing production was adversely affected by macroeconomic conditions, by local regulation arising from what it characterized as NIMBY (standing for “Not In My Backyard”) resistance to community growth and social and racial integration, and by regulation for valid public purposes that nonetheless do not take sufficient account of the costs imposed on housing production (such as federal and state environmental regulation). As requested, the commission recommended specific policy options to address local regulatory barriers to producing affordable housing. Yet it went on to distinguish the inquiry pertinent to affordable housing for low- and very low-income households. It concluded that although regulatory barriers may exacerbate housing affordability generally, poverty was the main reason housing was unaffordable for this population. Thus, addressing regulatory barriers could not be expected to resolve “housing affordability” across the board.

What had been dropped in these post-Operation BREAKTHROUGH studies, however—building technologies—was taken up again in the late 1990s under the Clinton Administration. In 1998, PD&R became lead coordinator of an initiative called the Partnership for Advancing Technology in Housing (PATH).

PATH developed out of meetings convened by the White House in 1994 to derive a set of national construction goals (Martin, 2005). The residential construction industry, represented by home builders, code officials, product manufacturers, federal researchers across the cabinet, and other interested parties, developed a research plan for implementing those goals for the housing sector. PATH was the outgrowth of those proposals. Its concern with building technologies did not focus solely on innovative ways to reduce construction costs. PATH was initially meant to mimic innovation projects in the U.S. Department of Energy, like ENERGY STAR and Building America, and focus on improving the housing product by making it less costly to live in, more energy efficient, more resistant to decay or disaster, and safer. Its core conceptual basis was that “innovative technologies can improve housing performance” resulting in social benefits, and that the slow pace of innovation in the housing industry required federal intervention (Martin, 2005: 11).

In the late 1970s, PD&R had engaged in research on energy conservation in housing (in cooperation with the Department of Energy and other agencies), including new energy-efficient residential structures. PATH would be a larger and more heavily budgeted initiative that incorporated a related concern. HUD’s submission to Congress explaining its FY 2000 budget requests described the PATH initiative as a key component of the administration’s program to improve the technology infrastructure of the United States and reduce carbon emissions. “The goals of the partnership are to reduce the time to market of new technologies, cutting the energy use and the environmental impact of new homes, increasing housing durability, reducing natural hazard risk and reducing the monthly cost of new housing” (HUD, n.d. [1999]). The renewed housing technology initiative thus emphasized housing affordability as a function of the cost to live in and maintain it, rather than to construct it, and technological innovation geared toward construction quality and sustainability rather than industrial production.

In its later years, after a 2002 assessment of the PATH project by NRC, the PATH initiative increased its emphasis on finding ways to remove regulatory barriers to the widespread use of innovative housing technologies. The goal of barrier removal was then on a par with dissemination of information on technological advances and support for housing technology R&D. In PD&R’s self-review of the initiative in 2005, it admitted that preceding years of PATH activities had lacked organization and focus, in part because of the few PD&R staff available to lead the Partnership effort (Martin, 2005). Congress no longer funded PATH starting in 2007, and its activities wound down in 2008. Through 2015, a website catalogued the resources on advanced building technologies and practices that emerged from the decade-long public-private partnership ([www.pathnet.org](http://www.pathnet.org)). Although that online resource is no longer active, information about building healthy, energy-efficient homes, and addressing barriers to affordable housing construction, is available on PD&R’s online information hub ([huduser.gov](http://huduser.gov)).

### **The Next Big Social Experiment—Subsidies Not Only To Live in a Decent Home, but for a Decent Home in a Suitable Environment**

The EHAP and Section 8 Existing Housing evaluations of the 1970s had asked many questions about the feasibility and advisability of subsidizing decent housing for low-income households through direct cash allowances or housing vouchers. Beginning in 1994, PD&R initiated another large experiment and demonstration that gave housing vouchers to low-income families to move from high-poverty to low-poverty neighborhoods. This effort was the Moving to Opportunity for Fair Housing (MTO) demonstration program.

The impetus for this project was not a commission, but a growing body of social science literature analyzing court-ordered programs instituted in the 1970s and 1980s to remedy segregated public housing in various cities. The most significant program was the court-ordered Gautreaux Assisted Housing Program in Chicago, which began as a demonstration in 1976 before being formalized in a 1981 consent decree (Roisman and Botein, 1993). In a class-action lawsuit begun in 1966 as *Gautreaux v. Chicago Housing Authority*, both the housing authority and HUD were found liable for racial segregation in Chicago's public housing. The litigation was long and complex but ultimately resulted in a consent decree in 1981 requiring HUD to establish and fund a program to provide more than 7,000 families with tenant-based Section 8 vouchers and mobility counseling to move to either majority-White or racially mixed neighborhoods throughout the Chicago metropolitan area.

By the beginning of the 1990s, research on the effects of the *Gautreaux* program was showing positive effects from the participants' moves to predominantly White suburbs (Shroder and Orr, 2012). A plaintiffs' attorney in *Gautreaux* approached HUD and Congress and, citing these studies, suggested HUD repeat the *Gautreaux* program in other metropolitan areas. Congress and the George H.W. Bush Administration were amenable to the idea but decided to focus on the initiative as one of poverty deconcentration rather than racial desegregation. Other social science studies of the time had also found strong associations between living in high-poverty areas and negative outcomes (Shroder and Orr, 2012).

The *Gautreaux* program had not been a randomized experiment, however, so the studies reporting on its positive outcomes were undermined by methodological problems and could not provide clear evidence about the effects of moving to different neighborhoods (Shroder and Orr, 2012). PD&R staff therefore developed a demonstration program that would rigorously test the effects of a *Gautreaux*-type mobility program.

HUD proposed language to Congress to authorize the demonstration program. Congress enacted it largely as proposed in the Housing and Community Development Act of 1992,<sup>17</sup> except it narrowed the target population to residents of public and assisted housing rather than including unassisted households (Shroder and Orr, 2012). PD&R initially implemented the demonstration through a contract with an outside research organization, Abt Associates, Inc. Together, PD&R staff and researchers from Abt designed an experiment that directly and rigorously tested whether moves to low-poverty areas could bring about positive changes in the lives of poor families by randomly assigning participants so that selection bias of the participant family would not undermine comparisons made based on all test groups as a whole (Orr et al., 2003; Shroder and Orr, 2012).

MTO ran in five large cities (Baltimore, Maryland, Boston, Massachusetts, Chicago, Illinois, Los Angeles, California, and New York City) where 4,608 families enrolled between September 1994 and August 1998. Like the EHAP research project, the critical feature of MTO's research design was random assignment of the families who joined the demonstration. In MTO, each family was randomly assigned to one of three groups. (1) The experimental group was offered housing vouchers that could be used only in low-poverty neighborhoods (where less than 10 percent of the population was poor). Local counseling agencies helped the experimental group members to find and lease units in qualifying neighborhoods. (2) The Section 8 group was offered vouchers according to the regular rules and services of the Section 8 program at that time, with no geographical restriction and no special assistance. (3) The control group members were not offered vouchers but continued to live in public housing or receive other project-based housing assistance (Orr et al., 2003).

<sup>17</sup> Pub. L. 102–550, Sec. 152, 106 Stat. 3672, 3716 (Oct. 28, 1992).



PD&R's work on MTO was planned, long range, and integrated with the wider public and private research community, which generated further agglomeration of evidence and analyses on neighborhood effects for life outcomes. MTO collected a broader range of information about outcomes of the intervention, expanding the original query into economic and educational outcomes, on which the congressional call for the study focused, to include questions about physical and mental health outcomes. PD&R expanded the followup data collection for this purpose by coordinating with researchers funded by an array of other agencies and private foundations (Sanbonmatsu et al., 2011).

MTO was designed with short- and long-range outcome evaluation periods. In 2003, an *Interim Impacts Evaluation* (Orr et al., 2003) reported that moving to lower-poverty neighborhoods had significant positive impacts on personal safety, housing quality, mental health, and obesity among adults and on mental health, staying in school, delinquency, and risky behavior among teenage girls. The evaluation showed some negative effects on boys' behavior, however, and no statistically significant effects on employment outcomes for adults or educational achievement for children. Only marginal improvements were found in the quality of schools attended.

In 2011, PD&R published the analysis of long-term effects from the MTO demonstration (Sanbonmatsu et al., 2011). The results showed that MTO moves led to sustained improvements in housing quality and in neighborhood environment, such as its socioeconomic composition and safety. Mental and physical health improvements were sustained, but MTO had no detectable impacts on work, earnings, or other economic impacts for adults. Youth showed similar gender difference in responses to MTO at the long-range as they had at the interim evaluation (Sanbonmatsu et al., 2011).

The 2012 issue of PD&R's social science journal, *Cityscape*, was devoted to analyses of the MTO demonstration by various researchers and academics. By that time, MTO had provided data for a number of different insights about neighborhood effects and bases for further investigations (Ludwig, 2012). Although the analyses by that point had not found positive impacts on economic and educational achievement, the data showed significant

physical and mental health benefits from the intervention. Not only was psychological distress notably diminished, but extreme obesity and diabetes were reduced by 40 percent (Ludwig, 2012).

In 2015, however, MTO data that PD&R made available to the wider research community provided for the development of new evidence of the impacts of the mobility intervention. MTO data at a micro level are generally unavailable to outside researchers because of privacy concerns, but PD&R could recently provide such data to academic researchers under controlled conditions. Analyzing these data along with tax data, the outside researchers were able to provide new evidence that, contrary to the previous findings of no economic or educational benefits, MTO moves actually provided for a significant improvement in college attendance rates and earning for children who were younger than age 13 when their families moved and that these children lived in lower-poverty neighborhoods as adults and were less likely to become single parents (Chetty, Hendren, and Katz, 2015).

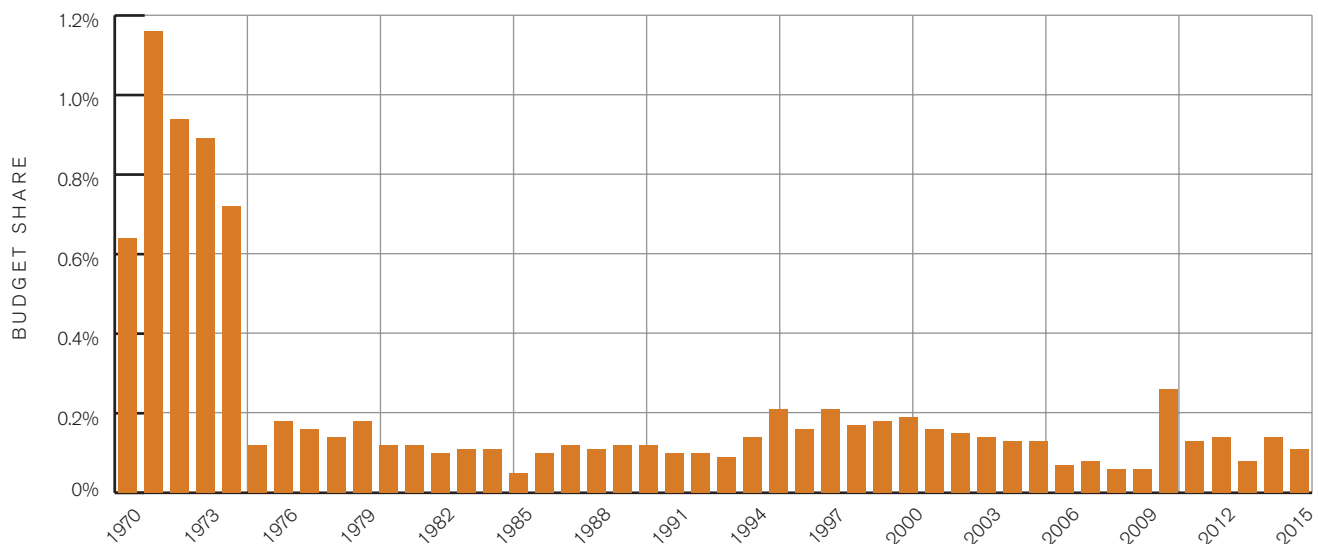
# Decline and (Temporary?) Renewal of Budgetary Resources

Congressional and White House priorities nudged PD&R's big-picture research questions over the years, as they did the budgetary resources with which PD&R had to do its research work. The first decade was very kind to PD&R and its predecessor research office in terms of financial resources. In nominal dollars, the appropriations for HUD's "Research and Technology" account, which funds all PD&R activities other than staff salaries and expenses, were larger in the 1970s than they would be again, at least until HUD sought to augment them beginning in 2010 with funds transferred from other program accounts under a Transformation Initiative (TI).

Appropriations for PD&R's predecessor office more than doubled in nominal terms from 1969 to 1970 (from \$11

million to \$23 million) and nearly doubled again to \$45 million in both 1971 and 1972. Most of this funding went to the planning and development of prototype housing sites under Operation BREAKTHROUGH. Appropriations jumped again to \$53 million for 1973, at which point the research office merged with the policy and program evaluation division to become PD&R. From 1973 through 1979, one-fourth of PD&R's average funding of \$55 million went to activities under EHAP. From 1975 through 1979, another 21 percent on average went to housing and housing market surveys, including the AHS. PD&R's funding would never again be as high or represent as large a proportion of HUD's total budget as it did from 1969 through 1974. Figures 1 and 2 show the contrast between these early years and the rest of PD&R's history.

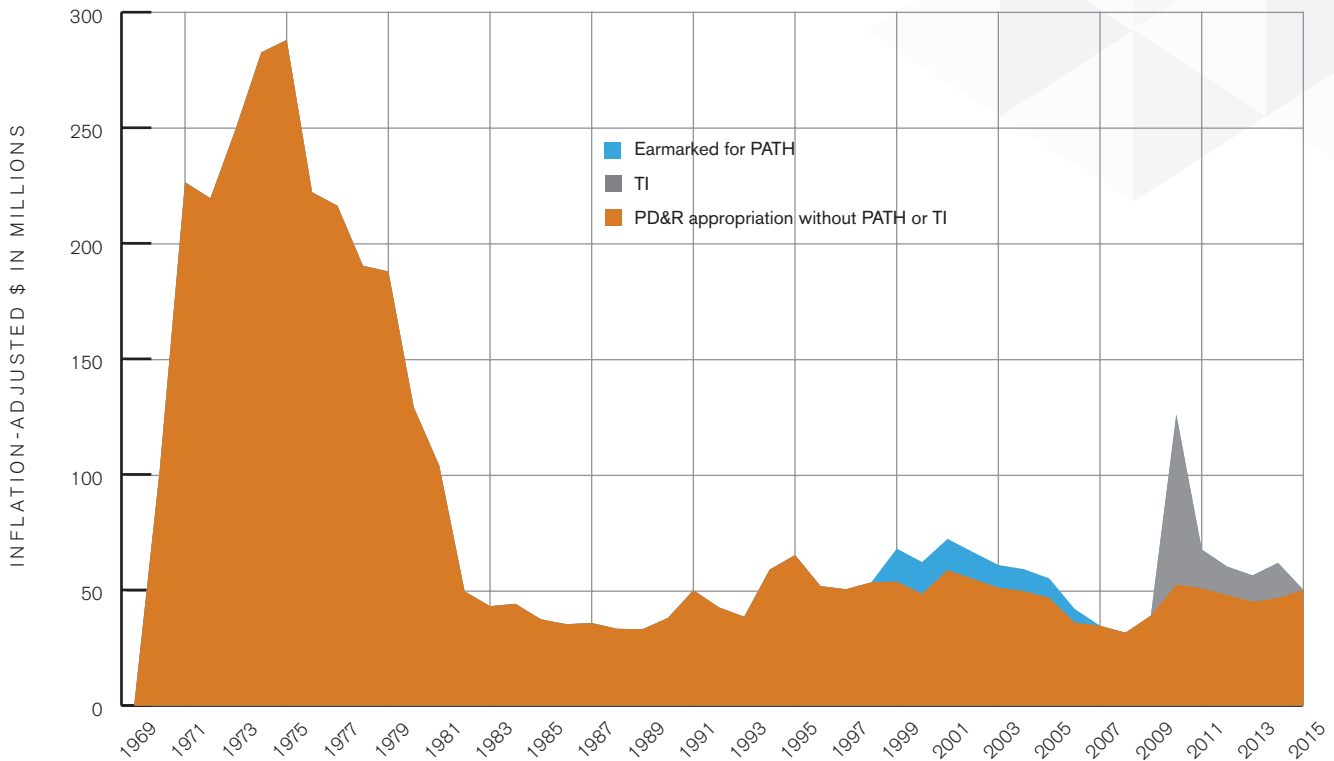
**Figure 1. Share of HUD Budget Authority Appropriated for Research and Analysis Activities (Excluding Salaries and Expenses): 1970–2015**



**Notes:** For 1970 through 1974, the Office of Policy Development and Research (PD&R) appropriation is reduced by \$6.5 million to approximate salaries and expenses that were appropriated separately in 1975 and 1976 and subsequently through a departmentwide administrative account. For 2006 through 2009, appropriations earmarked for community development grants to certain universities, but funded through PD&R's appropriations account, are excluded from the calculations.

**Sources:** Compiled from historical tables in the U.S. budget of total appropriations by agency (OMB, 2015); U.S. budget appendixes showing appropriations to offices within the U.S. Department of Housing and Urban Development (HUD) for 1971 through 2010 (OMB, 1970–2009); data in HUD's congressional justifications accompanying its fiscal year 2016 budget requests (HUD, n.d. [2015a]); and PD&R administrative records (HUD, 2006).

**Figure 2. PD&R Appropriation (Excluding Salaries and Expenses): 1969–2015 (constant 2015 dollars)**



PATH = Partnership for Advancing Technology in Housing. PD&R = Office of Policy Development and Research. TI = Transformation Initiative.

**Note:** Inflation adjustment uses the Consumer Price Index Inflation Calculator from the U.S. Department of Labor, Bureau of Labor Statistics.

**Sources:** Compiled from historical tables in the U.S. budget of total appropriations by agency (OMB, 2015); U.S. budget appendixes showing appropriations to offices within the U.S. Department of Housing and Urban Development (HUD) for 1971 through 2010 (OMB, 1970–2009); data in HUD’s congressional justifications accompanying its fiscal year 2016 budget requests (HUD, n.d. [2015a]); and PD&R administrative records (HUD, 2006).

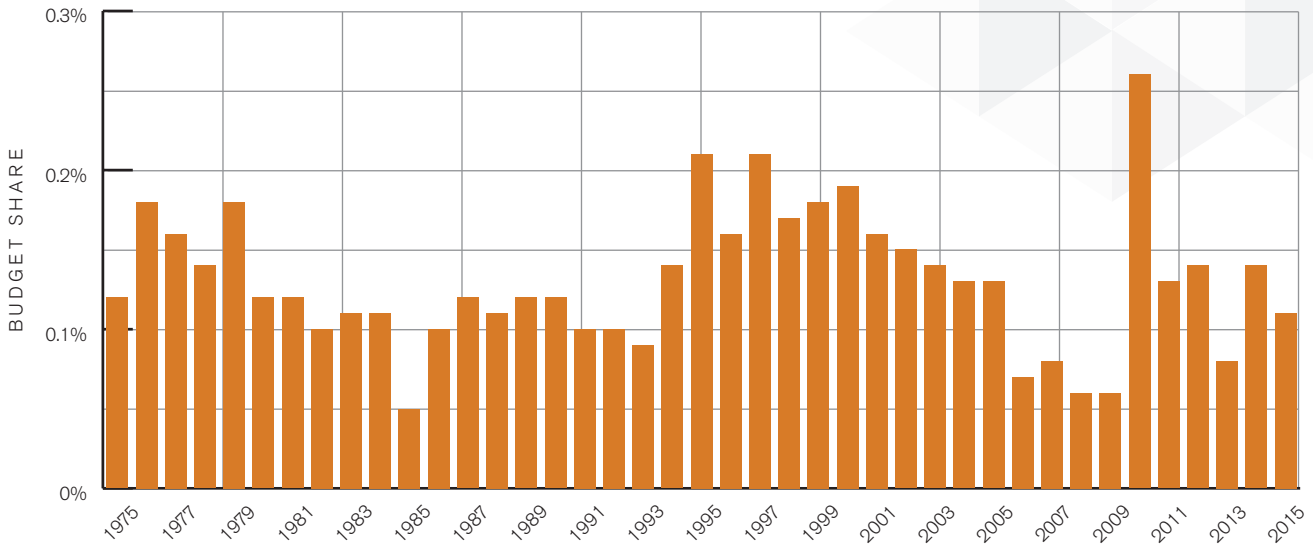
Figure 2 shows the appropriations for PD&R in dollar amounts adjusted for inflation to represent constant 2015 dollars. The portion of each appropriation from 1999 through 2006 that was earmarked for the PATH project is distinguished, as is the supplement to PD&R’s budget resources in 2010 through 2014 that was transferred from other program’s appropriations under HUD’s TI.

Each year’s appropriation of funds for a federal program or office like PD&R result from an interplay between the President’s budget request (generally submitted to Congress a year and a half before the fiscal year for which funds are sought) and Congress’ agreement or changes to

the amounts proposed when it passes an appropriations bill for the President’s signature. Indeed, PD&R’s budgetary resources over the years show some marked changes with changes in the White House, even though Congress’ appropriation decisions would have impacted those levels as well.

Figure 3 charts PD&R’s share of the total HUD budget from 1975 through 2015. Figure 4 charts changes in the average dollar amounts appropriated and share of HUD’s total budget devoted to PD&R across periods under different presidents and their HUD Secretaries. Figure 4 then shows averages across administrations.

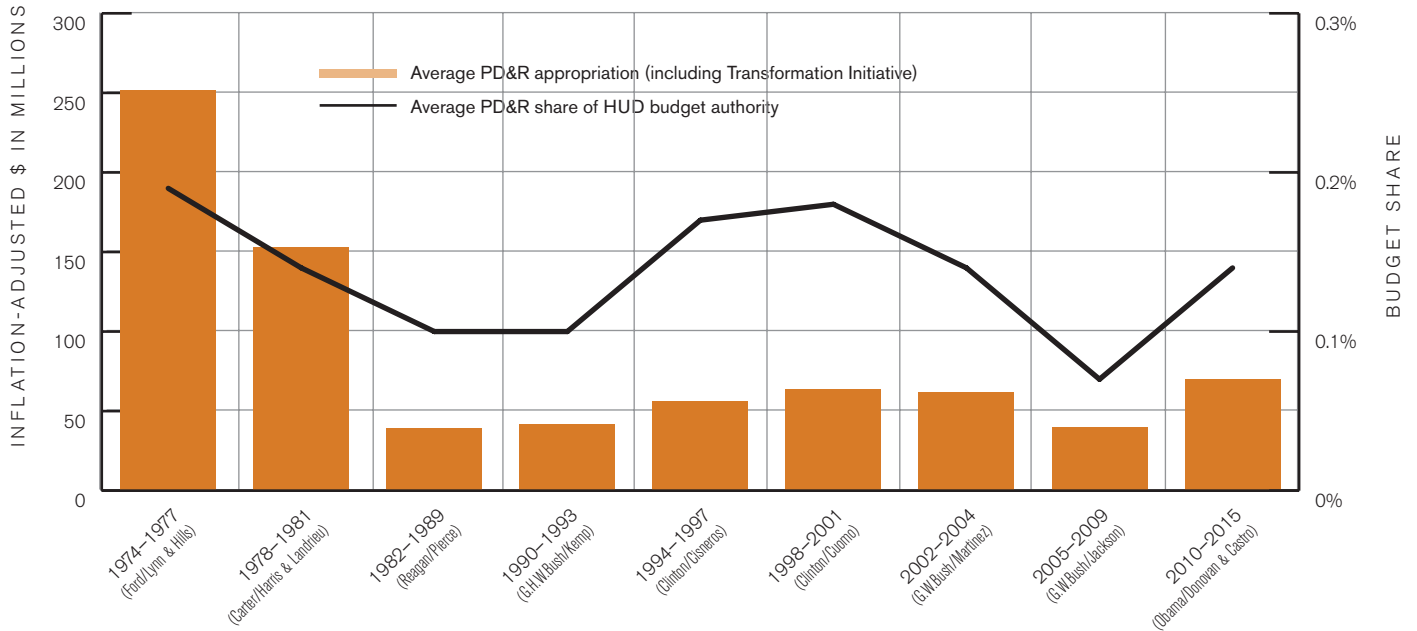
**Figure 3. Share of HUD Budget Authority Appropriated for PD&R: 1975–2015**



PD&R = Office of Policy Development and Research.

**Sources:** Compiled from historical tables in the U.S. budget of total appropriations by agency (OMB, 2015); U.S. budget appendixes showing appropriations to offices within the U.S. Department of Housing and Urban Development (HUD) for 1971 through 2010 (OMB, 1970–2009); data in HUD’s congressional justifications accompanying its fiscal year 2016 budget requests (HUD, n.d. [2015a]); and PD&R administrative records (HUD, 2006).

**Figure 4. Average PD&R Appropriation and Share of HUD Budget Authority Across Administrations**



PD&R = Office of Policy Development and Research.

**Note:** Inflation adjustment uses the Consumer Price Index Inflation Calculator from the U.S. Department of Labor, Bureau of Labor Statistics.

**Sources:** Compiled from historical tables in the U.S. budget of total appropriations by agency (OMB, 2015); U.S. budget appendixes showing appropriations to offices within the U.S. Department of Housing and Urban Development (HUD) for 1971 through 2010 (OMB, 1970–2009); data in HUD’s congressional justifications accompanying its fiscal year 2016 budget requests (HUD, n.d. [2015a]); and PD&R administrative records (HUD, 2006).

PD&R's budgetary resources reached a new low point in 2008, as both a dollar amount and as a share of HUD resources. For developing the federal knowledgebase about housing and community development issues, PD&R was allotted \$28.4 million, which constituted about 0.06 percent of HUD's total budget in that year. The funding was barely enough to fund PD&R's annual fixed costs of mandatory housing market surveys—including the AHS, the Survey of New Home Sales and Completions, the Survey of Market Absorption of Multifamily Units, and the Survey of New Manufactured Housing Placements (estimated at \$25 million)<sup>18</sup>—and research dissemination activities, including operating a research clearinghouse and publishing a scholarly journal and two other research periodicals (estimated at \$5 million; HUD, n.d. [2007]).

At this point of disinvestment in PD&R's work, NRC reported on its evaluation of PD&R (NRC, 2008). Congress had commissioned the evaluation in HUD's FY 2006 appropriations act.<sup>19</sup> The House of Representatives' Committee on Appropriations issued instructions for the NRC evaluation in a report accompanying the act. These instructions indicated that at least some members of Congress doubted whether HUD's research office should continue in existence. The House report asked NRC to “recommend the future of HUD's research program” and to “examine the elimination of an in house research office, if the [NRC] sees no long-term value to HUD specific research or that HUD related research can or should be done by other Departments.”<sup>20</sup>

Contrary to House members' doubts, however, NRC found that most of PD&R's work was high quality, relevant, timely, and useful. In addition, although Congress had directed NRC *not* to offer budget recommendations, the NRC report emphasized how PD&R's financial and staff resources had eroded over the preceding years and concluded that PD&R “could lead the nation's ongoing process of learning, debate, and experimentation about critical housing and urban development challenges,” but only with more adequate funding (NRC, 2008: 3). NRC found that “current budget levels make it infeasible to launch large-scale research initiatives or rigorous program evaluations

and often severely limit the methodologies PD&R can use” (NRC, 2008: 2). It also noted how PD&R's budget reductions resulted in cutbacks on the scale and frequency of the AHS and other basic housing data infrastructure, thereby “compromising their usefulness for understanding market conditions and trends” (NRC, 2008: 2).

In 2009, the Obama Administration made its first budget requests for the government's 2010 appropriations. The President's budget sought a dramatic increase in PD&R's budgetary resources by raising PD&R's direct appropriation to \$50 million and by supplementing the appropriation with a transfer of up to 1 percent of other HUD program appropriations as part of a Transformation Initiative (TI) to improve HUD's performance across the board (HUD, n.d. [2009]). HUD's justifications to Congress for requesting these PD&R resources quoted NRC's 2008 report to make the case that “PD&R needs additional financial and intellectual resources to allow it to continue and expand its current role in analyzing existing and proposed HUD programs, and it requires resources to play a larger role in the national research community on a wider range of housing and urban development policy issues” (HUD, n.d. [2009]: Q-2). The justification appears to have been successful.

For FY 2010, Congress increased PD&R's appropriation to \$48 million and authorized the transfer of funds to PD&R's use with the result that PD&R was allotted \$115.5 million, or slightly more than 0.25 percent of HUD's total budget authority. Congress continued to authorize transferring a small fraction of other HUD program funds to be used for research and program evaluations, but PD&R was allotted no more than \$60 million on average from FY 2011 through FY 2014 (HUD, n.d. [2015a]).

With the additional resources provided by appropriations and the TI, PD&R began implementing many of the recommendations in NRC's 2008 report. One result was PD&R's new *HUD Research Roadmap: FY 2014–FY 2018*, published in 2013, which set out an agenda of priority research projects, demonstrations, and program evaluations that PD&R developed through a year-long process of consultations with outside academics, practitioners, and policymakers from all levels of government (HUD, 2013). Begun in 2011, this new process responded to NRC's criticism that PD&R's agenda-setting process

<sup>18</sup> The average annual cost for mandatory housing, housing market, and FMR surveys was \$24.2 million in the 5 years before 2008 (NRC, 2008).

<sup>19</sup> Transportation, Treasury, Housing and Urban Development, the Judiciary, the District of Columbia, and Independent Agencies Appropriations Act, 2006. Pub. L. 109–115, 119 Stat. 2455.

<sup>20</sup> House Report 109–153 (June 24, 2005): 103–104.

was too insular. Before then, PD&R queried the assistant secretaries and staff of HUD's various program areas (for example, the offices of Public and Indian Housing, Community Planning and Development, Fair Housing and Equal Opportunity, and Housing-Federal Housing Administration), asking their suggestions for needed studies. PD&R and the program office heads would prioritize the suggested projects and determine which could be accomplished with available funding (NRC, 2008). In contrast, the new process asked for "timely research questions relevant to HUD's mission" from within and without HUD, then solicited ideas for study projects and revised and prioritized the projects through external and internal consultations (HUD, 2013).

The additional funding also enabled PD&R to respond to NRC's recommendation for an increased level of large-scale studies. PD&R initiated seven such large, multiyear studies between 2010 and 2015, each of which used research methodologies designed to make reliable causal inferences.<sup>21</sup> Two-thirds of PD&R's research funding for this period was devoted to these studies (O'Regan, 2015).

PD&R was also able to restore the AHS to its historical sampling levels, with a full complement of extra metropolitan-area surveys, and to augment the data collection as recommended by the NRC report. (See the discussion of AHS in the section "The American Housing Survey.") PD&R partnered with the U.S. Postal Service (USPS) to incorporate USPS data on vacant addresses into HUD's research and in 2010 created a data-matching file, updated quarterly, to enable researchers to refine the allocation of census data between small areas by connecting ZIP+4 and U.S. Census Bureau geographies (HUD, n.d. [2015c]). It began developing a web-based "storefront," enabling HUD staff, grantees, and the general public to search and use HUD's catalog of geospatial information and mapping resources (HUD, 2014).

PD&R also put its new resources to work on NRC's recommendations for improving how PD&R disseminates

its research to the wider community of researchers, practitioners, and the public. PD&R redesigned its Internet portal, HUDUSER.org (now HUDUSER.gov), to improve and simplify the ability of users to search for and download any of the multitude of research papers and publications maintained in PD&R's research clearinghouse.<sup>22</sup> It began to hold and webcast panel discussions on the latest research from PD&R. It developed mobile applications for quick access to its national housing market data. It also reconfigured its slate of electronic and print periodicals by creating an online magazine, *The Edge*, with news of research studies and findings and with case studies of recent housing and community development projects. In 2011, PD&R published the first issue of a quarterly publication, *Evidence Matters*, each issue of which incorporates articles by experts within and without HUD. PD&R also continues to publish the scholarly journal *Cityscape*<sup>23</sup> three times a year, both electronically and in print (HUD, 2012).

In FY 2015, however, Congress directed TI funds elsewhere within HUD, so PD&R saw no supplement to its resources.<sup>24</sup> For FY 2016, HUD again requested authority to transfer funds to PD&R through the TI to raise PD&R's resources to approximately 0.19 percent of HUD's total budget in 2015, explaining to Congress that even this level of investment in HUD's research arm would trail behind the investment in comparable federal research offices. HUD found that the share of the U.S. Department of Agriculture's resources that went to its research divisions was nearly seven times more (1.3 percent); the share of the U.S. Department of Education's resources that went to its Institute of Education Sciences was five times as great (0.9 percent); and the Strategic Highway Research Program at the U.S. Department of Transportation had a 0.2 percent share of program resources (still more than PD&R's requested amount; HUD, 2012).

<sup>21</sup> The seven studies are: (1) the Evaluation of the Family Self-Sufficiency Program; (2) Pre-Purchase Counseling Demonstration and Impact Evaluation; (3) Family Options Study; (4) Rent Reform Demonstration; (5) Housing Discrimination Studies (HDS); (6) Housing Choice Voucher Program Administrative Fee Study; and (7) Assessment of American Indian, Alaska Native, and Native Hawaiian Housing Needs. The first four of these studies use random assignment, HDS uses the paired-testing research methodology pioneered by PD&R in 1977, and the Administrative Fee Study uses random motion sampling techniques (O'Regan, 2015).

<sup>22</sup> PD&R established the HUD USER Clearinghouse in 1978 as the primary source for federal government information on housing-related and urban development topics. In 1995, PD&R added an online portal for the information clearinghouse, HUDUSER.org (Vreeke et al., 2001). The website provides direct public access to an extensive collection of internally and externally produced research reports, PD&R publications, and PD&R's public-access data sets.

<sup>23</sup> PD&R published the first issue of *Cityscape* in 1994. The journal publishes original scholarly research and analyses in refereed and unrefereed sections. The journal averaged 640,000 electronic downloads from HUDUSER.org in 2011 and 2012 (HUD, 2014).

<sup>24</sup> In FY 2010, the TI added \$67.5 million to PD&R's \$48 million appropriation for \$115.5 million; the combined total resources in FYs 2011 through 2014 averaged \$60 million. PD&R's budget in FY 2015 was \$50 million and lacked a TI supplement (HUD, n.d. [2015a]).

# Evolving Data

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Housing and community development data are inevitably central to PD&R's role as a national center for research and policy development. Notwithstanding shifting policy priorities from Congress and the White House that directed PD&R's analyses in one direction or another, PD&R has continued to build up relevant data resources for internal and public use over its nearly 50-year history. Some of the data sets are primarily for use in the operation of HUD programs, such as data on Fair Market Rents (FMR) used in HUD's Section 8 housing voucher program. Other data sets are primarily for use by researchers and policymakers inside and outside HUD, providing longitudinal and current information about the nation's housing conditions and housing and related markets. According to NRC, "providing public-use data sets is arguably one of PD&R's most important functions," as it is necessary not only for the administration of HUD programs, but for making informed policy decisions and for supporting independent research on housing and urban policy issues that develop the public policy discourse (NRC, 2008: 117). The three examples that follow show the evolution of PD&R's data resources.

## The American Housing Survey

A notable example of PD&R's development of (and ability to develop) housing-related data and analysis through the thick and thin of budget constraints is one of PD&R's premier data sets, the AHS. It tracks the same sample housing units over time (albeit updated to account for newly available stock). This survey of the housing stock is the only national data set with detailed information about the characteristics and condition of individual housing units, the households living in them, housing costs (including utilities), and neighborhoods. It is heavily used inside and outside HUD (NRC, 2008). It is funded by PD&R and collected by the Census Bureau with questionnaires and sample sets produced under PD&R's guidance. In 1971, PD&R began working with the Census Bureau to create the then-annual survey, creating its sampling frame, questionnaires, and survey procedures. The first survey, then known as the Annual Housing Survey, took place in 1973. From 1973 to 1981 it remained an annual survey and data collection. From that point it became a biennial survey, so that it is now

called the American Housing Survey.

The AHS is really two surveys: one of the national housing stock and another of metropolitan housing stock. The metropolitan-area surveys originally included 60 metropolitan areas surveyed every 3 years (on a rotation of 20 metropolitan-area surveys per year). Budget constraints reduced the number and frequency. Through the 2000s, a shrinking PD&R budget required reducing the sample size (the number of homes surveyed) for the nationwide report of housing conditions and reducing the number and frequency of metropolitan-specific reports derived from adding home surveys focused in a metropolitan area to produce statistically significant results specific to that area. In 2005, it had become 21 metropolitan areas surveyed at 6-year intervals; that is, on a rotation of 7 metropolitan areas surveyed every 2 years (Eggers and Thackeray, 2007).

In 2008, NRC recommended that this critical resource be made more effective by renewing its metropolitan-area data to former levels, oversampling HUD-assisted households to generate reliable data specific to that type of housing, and adding questions to some of the surveys (so-called "topical modules") designed to address timely policy questions (NRC, 2008). When PD&R's financial resources increased in 2010, PD&R implemented these recommendations. The AHS is still biennial, but the number of metropolitan-area surveys is now 60, and they are all surveyed every 4 rather than every 6 years (on biennial rotation; HUD, n.d. [2015c]). As NRC recommended, PD&R also added an oversampling of HUD-assisted housing to provide reliable statistics on HUD-assisted tenants' views of the condition of their housing. Beginning in 2013, PD&R created topical modules, extending the questions in a subset of the surveys to provide information on subjects such as public transportation, disaster preparedness, and neighborhood characteristics (HUD, 2012; 2014).

## Housing Discrimination

Another notable example of PD&R's role in developing the housing-related knowledge base is its work on housing discrimination research. In 1968, the Kerner Commission had emphasized the role of racial discrimination and segregated living patterns as a source of the riots that were erupting in cities across the country. Also in 1968, Congress enacted the Fair Housing Act,<sup>25</sup> which included a provision for HUD to administer its programs so as to affirmatively further the goal of eliminating housing discrimination. PD&R has helped HUD respond to the housing and urban concerns raised so pointedly in that era by creating, integrating, and making more usable national data sources on the nature and extent of housing discrimination in the United States over the years.

PD&R has made significant contributions to the body of knowledge on housing discrimination in the United States with its Housing Discrimination Studies (HDS). The HDS are a series of nationwide paired-testing studies that monitor trends in racial and ethnic discrimination in both rental and home sales markets approximately once each decade. PD&R conducted such studies in 1977, 1989, 2000, and 2012 (Fudge, 2014). The paired-testing methodology, in which two people, one White and the other a minority, pose as equally qualified homeseekers and inquire about available homes or apartments, measures the extent to which the testers receive unequal treatment from housing providers.

The 2012 HDS (HDS2012) conducted more than 8,000 tests in a nationally representative sample of 28 metropolitan areas. Rather than emphasizing gross measures of differential treatment, as had previous national studies, HDS2012 focused on the net measure—the difference between the share of tests in which the White tester was favored over the minority and the share in which the Black, Hispanic, or Asian tester was favored. HDS2012 used this approach because analysis during the past 25 years strongly suggests that gross measures reflect a number of random distinctions and that net measures more accurately reflect the systematic disadvantages faced by minority homeseekers (Turner et al., 2013).

HDS2012 found that the most blatant forms of housing discrimination had declined since HDS1977, in that well-qualified minority homeseekers were generally as likely as well-qualified White homeseekers to get an appointment and be shown at least one available housing unit. It found that subtler forms of discrimination persist, however, in that minority homeseekers are told about and shown fewer homes and apartments than White homeseekers. It found no substantial differences in the incidence or severity of discrimination across metropolitan areas or regions of country, suggesting a nationwide problem (Turner et al., 2013). HDS2012 also expanded on previous investigations by assessing the extent to which a tester's race or ethnicity was identifiable by name and speech (as in an e-mail or on a phone call) and in person. The study found that minorities whose ethnicity is more readily identifiable—either by name, by speech, or in person—experience more discrimination than those who may be mistaken for White homeseekers (Turner et al., 2013).

Expanding on these investigations into trends of racial and ethnic discrimination, PD&R is also investigating housing discrimination against same-sex couples, families with children, people with physical disabilities, people with mental disabilities, and people who pay for housing with HUD voucher assistance. In 2015, for example, PD&R published the results of the first national paired-testing study of housing discrimination against people who are deaf or hard of hearing and against people who use wheelchairs. Focusing on housing searches conducted with telecommunication relay services (used by people who are deaf or hard of hearing) or searches for accessible buildings and housing units (sought by people who use wheelchairs), the study found evidence of systematic unfavorable treatment (Levy et al., 2015).

PD&R has also compiled data in a usable form to help HUD grantees analyze housing discrimination problems in their jurisdictions. In 2013, PD&R began a major effort to provide data and analytical tools to help state and local governments and public housing agencies that receive HUD grant funding to assess the extent of fair housing choice in their jurisdictions and regions so that the grantees may make informed decisions about strategies for overcoming the deleterious effects of discrimination. The effort was in support of HUD's revision of regulations implementing these grantees' statutory duty to affirmatively further fair

<sup>25</sup> Title VII of the Civil Rights Act of 1968, Pub. L. 90–284, 82 Stat. 73 (April 11, 1968).



housing, known as the AFFH regulations. PD&R created an integrated system of nationally uniform data (including geographic and mapping tools) that the grantees can use to complete a local assessment of fair housing. PD&R created local and regionally scalable data sets describing (1) patterns of integration and segregation; (2) racially and ethnically concentrated areas of poverty; (3) access to community assets such as education, employment, low-poverty neighborhoods, transportation, and environmental health; (4) disproportionate housing burdens (such as cost as a percentage of income or inadequate plumbing); and (5) housing disparities for individuals with disabilities and families with children.<sup>26</sup>

PD&R compiled and linked census data, HUD administrative data from various public and assisted programs, and other PD&R data sets drawn from relevant programs or activities under the direction of other agencies (such as data on Low-Income Housing Tax Credit [LIHTC] program housing projects, discussed in the next section). PD&R created, for example, two transportation-based indices from its widely used Location Affordability Index, or LAI, database. The indices measure the cost of transportation (including car trips) for residents in different areas and the availability of public transit. Other data that PD&R created for the AFFH assessments help gauge residents' access to proficient schools, employment opportunities, and environmental health hazards (HUD, 2015). In addition to creating relevant data sets, PD&R also built a platform that grantees can use to translate the data into maps to facilitate analysis of locational distinctions in the information. PD&R anticipates future development of the data and mapping tools.<sup>27</sup>

### **Housing Produced by the Low-Income Housing Tax Credit Program**

The LIHTC database that PD&R has integrated into the data and data tools provided for community fair housing analyses is a good example of PD&R's role in the evolution of key housing-related information.

The LIHTC program has become the primary source of federal investment in low-income housing production, subsidizing the construction of more units than all other active programs combined (NRC, 2008).<sup>28</sup> The LIHTC was created by the Tax Reform Act of 1986,<sup>29</sup> which replaced various tax provisions favoring rental housing with a program of credits for the production of rental housing targeted to lower-income households. LIHTC is administered by state housing agencies (and a few large metropolitan housing agencies) with oversight by the Treasury Department's tax division, the Internal Revenue Service. Each state or metropolitan credit-allocating agency is provided a share of federal tax credits based on population to disburse to property owners for the acquisition, rehabilitation, or new construction of rental housing. The credits are generally sold to outside investors to raise initial development funds for a project.

PD&R undertook a study very early in the LIHTC program based on a sample of properties developed in 1987 and 1988, but very little new research was available after this initial work until PD&R began creation of its National LIHTC Database (Burton et al., 2000).

In 1993, then-Assistant Secretary for PD&R Michael Stegman explained in an interview that no systematic information was available about where tax credit housing was located (for example, inside or outside cities) or the kind of households it was serving. Although the Treasury Department (and state housing finance agencies that distribute and monitor the use of the housing tax credits), rather than HUD, administer the program, Stegman explained that PD&R was in the process of developing a database of LIHTC projects in order to be able to answer basic questions about its housing-relevant effects and to make it available for systematic research by outside entities with the resources to do so (Hartman, 1993).

In 1996, PD&R published a report (Abt, 1996) describing the state of its LIHTC database, which then comprised all LIHTC projects placed in service from 1992 through 1994, their locations, and descriptive variables such as project size and whether the project was newly constructed

<sup>26</sup> See U.S. Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Assessment Tool: Solicitation of Comment—60-Day Notice Under Paperwork Reduction Act of 1995. 79 Federal Register 57949, 57950–57951 (Sept. 26, 2014).

<sup>27</sup> See U.S. Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Assessment Tool: Solicitation of Comment—30-Day Notice Under Paperwork Reduction Act of 1995. 80 Federal Register 42108, 42111 (July 16, 2015).

<sup>28</sup> Congress' Joint Committee on Taxation estimated the average yearly tax expenditure for LIHTC for 2014 through 2018 to be \$10.1 billion. Although this amount is significant by comparison with HUD's total annual budget (currently averaging \$46 billion), it is a small fraction of annual tax expenditure on the federal income tax deduction for mortgage interest and real estate taxes, which currently averages \$148.8 billion (JCT, 2014).

<sup>29</sup> Pub. L. 99-514, 100 Stat. 2085 (Oct. 22, 1986).

or rehabilitated. It explained that PD&R was making the database available on its website as part of PD&R's effort to enable and encourage the entire research and policy community to use the data for high-quality research. The universe of LIHTC projects identified in the database then allowed appropriate sample frames for further studies on characteristics of LIHTC tenants and owners. PD&R made the database available on its website in 1997. It currently contains information on the size, unit mix, and locations of 40,502 projects comprising 2.6 million housing units placed in service between 1987 and 2013 (HUD, n.d. [2015b]).

The LIHTC database remains the primary data source available on the federal program, and researchers have used it to, for example, make inferences about the effect of tax credit housing on neighborhood poverty rates and housing prices (Belsky and Nipson, 2010).

With the enactment of the Housing and Economic Recovery Act of 2008, or HERA,<sup>30</sup> Congress required that state housing agencies administering the LIHTC program submit demographic and economic data on LIHTC tenants to HUD. PD&R began working with the state agencies to develop processes for compiling and transmitting tenant data that PD&R could combine into a national data set. Congress authorized, but never appropriated, funds to support a new data collection system. HUD and the state agencies therefore developed a system for collecting, compiling, and transmitting standardized data through an iterative, back-and-forth process, which took time (Hollar, 2014).

HUD published data submission standards in early 2010, but during the first several annual collections few states were able to submit information from a majority of properties, units, or tenants. By 2014, PD&R was able to report summary tables of state tenant data as of December 2012, although it nonetheless reported certain caveats on the coverage of the data, which are not complete for some states or for certain tenant-characteristic variables. The report is structured to focus readers on the areas in which the geographic and tenant characteristic data coverage is most complete (Hollar, 2014).

At the same time, PD&R continues to update the unit information in the LIHTC database each year. In 2015, for example, the database added units placed in service

through 2013 and units in about 1,300 projects that had been placed in service between 1987 and 2012 (HUD, n.d. [2015b]).

The AHS, data related to housing discrimination, and the LIHTC database show a longstanding and ever-evolving agglomeration of data and analyses initiated and maintained by PD&R on issues critical to HUD's mission. This knowledge base has continued to grow despite resource constraints and other political pressures.

<sup>30</sup> Pub. L. 110-289, 122 Stat. 2654 (July 30, 2008).

# Conclusion

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In 1969, a commission of the National Academy Sciences reported that precious little research and social science knowledge explored what was causing or could be done to improve the lived environment of the great number of people that inhabited U.S. cities, which were in such a state of decline that people were rioting, repeatedly. The report pulled no punches when it opined: “Had the launching of urban programs been accompanied by the understanding that it is virtually as important to learn about the nation’s

cities as it is to do something for them, the cities might not be in their present plight” (NRC, 1969: 1). PD&R grew out of this gap in knowledge. It has been nudged this way and that in research projects to accomplish the large task of learning about the nation’s cities (and metropolitan and rural communities) and people’s housing environments in those communities, yet still built up a significant (and accessible) federal hub for that ongoing learning.

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## HUD Office of Policy Development and Research

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**Lynn M. Ross**, AICP, Deputy Assistant Secretary for Policy Development

**Rachelle L. Levitt**, Director, Research Utilization Division

**Perrin Wright**, Author, on detail from the Office of General Counsel



U.S. Department of Housing and Urban Development  
Office of Policy Development and Research  
Washington, DC 20410-6000



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