HUD Capacity Assessment for Research, Evaluation, Statistics, and Analysis



U.S. Department of Housing and Urban Development | Office of Policy Development and Research

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1. Background

The U.S. Department of Housing and Urban Development (HUD) administers a diverse array of programs including, among others, low-rent public housing, assisted multifamily housing, and tenant-based rental assistance; Federal Housing Administration (FHA) mortgage insurance; the Ginnie Mae guaranty on mortgage-backed securities; lead hazard control and healthy homes grants; investigation, compliance, and enforcement of fair housing and civil rights; and community development and housing block grants, homeless assistance grants, and disaster recovery support. Since HUD was established from its predecessor agencies in 1965, research, statistics, and using other evidence have been central in shaping policy.

The Foundations for Evidence-Based Policymaking Act¹ (Evidence Act) signed into law in 2019 created several new mandates for federal agencies to undertake evidence building in a more systematic way. New officials must be appointed to oversee program evaluation, data governance, and statistical activities. Stakeholders must be consulted and multi-year learning agendas developed to identify research questions that need to be answered to inform policy. The Office of Management and Budget has defined a learning agenda as "a systematic plan for identifying and addressing policy questions relevant to the programs, policies, and regulations of the [organization]."² Annual evaluation plans must be developed to help implement learning agendas. "Capacity assessments for research, evaluation, statistics, and other analysis"—such as the assessment summarized in this document—must be conducted to gauge internal capabilities and needs to develop and use evidence effectively.

In implementing the Evidence Act, HUD has had the advantage of an existing internal evaluation office, the Office of Policy Development and Research (PD&R), that had previously coordinated stakeholder consultation and development of two research agendas ("Research Roadmaps")^{3,4} that covered overlapping five-year periods. HUD was initiating development of a third *Research Roadmap* when the Evidence Act was passed and integrated some of its newly required elements to develop the *Learning Agenda*.

The Evidence Act's capacity assessment mandate, however, posed a new challenge for HUD and for PD&R. It broadened HUD's conceptual frame for evidence-building capacity beyond PD&R's regular research, evaluation, and statistical business. Under the Evidence Act, evidence-building capacity must include research, data collection, performance assessment, and analysis activities and needs throughout the Department explicitly in an enterprise-wide perspective. Government-wide directives and guidance on the content of the Capacity Assessment are clarified in OMB's Circular A-11. This Capacity

¹ Public Law 115-435; <u>https://www.congress.gov/115/plaws/publ435/PLAW-115publ435.pdf</u>.

² OMB. Circular No. A-11 (2021), section 290.7, What is a Learning Agenda (i.e., "Evidence-Building Plan")? <u>https://www.whitehouse.gov/wp-content/uploads/2018/06/a11.pdf</u>.

³ HUD. 2013. HUD Research Roadmap: FY 2014–2018. <u>https://www.huduser.org/portal/about/pdr_roadmap.html</u>.

⁴ HUD. 2017. Research Roadmap: 2017 Update. <u>https://www.huduser.gov/portal/pdf/ResearchRoadmap-2017Update.pdf</u>.

Assessment is integral to *HUD's FY 2022–2026 Strategic Plan⁵* and will be updated periodically in subsequent strategic plans.

2. Overview of HUD's Evidence-Building Capacity

As required by the Office of Management and Budget,⁶ this capacity assessment covers four categories of evidence—statistics, evaluation, research, and analysis—and assesses them in terms of five criteria—coverage, quality, methods, effectiveness, and independence. Discussion of the four categories of evidence is woven throughout this document. The balance of Section 2 addresses five required components of a capacity assessment. Section 3 provides a narrative assessment using the five criteria. Section 4 supplements the narrative assessment with data from a new survey of HUD managers about their perceptions of the current state of evidence building pertaining to their programs. Section 5 provides a concluding summary.

Activities and Operations Being Assessed

The scope of this capacity assessment encompasses major active HUD program areas as well as key support functions that encompass evidence building related to program areas as a central function. The universe for the Government Accountability Office survey reported in Section 4 includes managers across the Department. The universe for HUD's survey of senior managers reported in the same section is slightly narrower. It includes senior managers with responsibilities for managing one or more major programs and selected managers involved in evidence building through evaluation, performance management, and data governance functions (N = 17). Program offices who participated in the survey include the following:

- Office of Public and Indian Housing—public housing and assisted housing programs
- Office of Housing—FHA mortgage insurance, assisted multifamily housing, housing counseling, and manufactured housing
- Office of Lead Hazard Control and Healthy Homes (OLHCHH)—lead hazard mitigation and healthy homes grants
- Office of Fair Housing and Equal Opportunity—fair housing and civil rights investigation, compliance, and enforcement
- Office of Community Planning and Development—community development block grants, HOME investment partnership grants, homeless assistance grants, disaster recovery grants, and other.

Support offices included in the assessment include the following:

- Office of Field Policy and Management
- Office of Policy Development and Research
- Office of the Chief Financial Officer

⁵ HUD. HUD Draft FY22-26 Strategic Plan Focus Areas. <u>https://www.hud.gov/HUD-FY22-26-Strategic-Plan-Focus-Areas</u>.

⁶ Circular A-11 (2021), <u>https://www.whitehouse.gov/wp-content/uploads/2018/06/a11.pdf</u>. Section 290.13. See Part 6 in Appendix A of this document.

• Office of the Chief Information Officer

Support functions not included in the universe for the HUD survey effort include legal counsel, administration, human resources, information technology, and public affairs.

How Evidence Building Supports HUD Offices

The Office of Policy Development and Research is HUD's central, independent office for evaluation, economic and statistical analysis, policy development support, and coordination of data governance. HUD's Evaluation Officer, Chief Data Officer, and Statistical Official positions are all located in PD&R. The development of a *HUD Research Roadmap* that informs the *Learning Agenda* has been initiated at intervals of roughly three years during the past decade since PD&R began development of the first *Research Roadmap* in FY 2012. It and subsequent Roadmaps take the needs of internal stakeholders from across the Department as a central input in prioritizing evidence-building work.

Additional centers for evaluation and analytics are found across the Department. The Office of Lead Hazard Control and Healthy Homes has authorization to conduct evaluations of lead hazard mitigation protocols and study healthy homes technical issues. Offices of evaluation, policy development, and risk assessment found within various program offices also contribute to evidence building. Notable offices with such functions include the Office of Risk Management office in FHA; the Real Estate Assessment Center and the Office of Policy, Programs, and Legislative Initiatives in the Office of Public and Indian Housing; and the Office of Systemic Investigations within the Office of Fair Housing and Equal Opportunity. Their input on evidence-building needs is central to development of HUD's *Learning Agenda*, and they will benefit from increased coordination of evidence building under the authority of the Evidence Act and a new department-wide Program Evaluation Policy Statement.

Balancing Competing Objectives for Evidence Building

OMB guidance recognizes that federal agencies call upon evidence-building efforts and activities to address a range of needs in addition to informing policymakers: organizational learning—"the process of improving actions through better knowledge and understanding";⁷ ongoing management of programs, performance, and strategic initiatives; interagency and private sector coordination; internal and external oversight; and accountability.

To substantial extent, HUD evidence-building efforts successfully balance these competing objectives. This balance is reflected in diverse activities:

• HUD has established processes of executive reviews of strategic goals' and Agency Priority Goals' progress informed by performance dashboards. Information derived from evidence building is integrated into Annual Performance Plans.

⁷ It has been noted that, "Scholars have proposed a variety of definitions of organizational learning." David A. Garvin. 1993. Building a Learning Organization. *Harvard Business Review*. July–August 1993. <u>https://hbr.org/1993/07/building-a-learning-organization</u>, citing, above, one such definition, from C. Marlene Fiol and Marjorie A. Lyles. 1985. "Organizational Learning." *Academy of Management Review*. 10 (4). 1 Oct 1985. <u>https://doi.org/10.5465/amr.1985.4279103</u>.

- PD&R engages with program offices on a quarterly basis to review evaluation and research progress and emerging needs. PD&R also presents quarterly research updates about major evaluations or policy topics to internal and external audiences.
- As part of HUD's iterative research roadmapping and *Learning Agenda* development process, PD&R seeks program office input to identify research questions that are emerging through policy developments and interactions with external stakeholders.
- PD&R conducts rigorous program demonstrations, evaluations, and research to support policy development and accountability, coordinates review of policy implications, and disseminates research products to diverse stakeholders. OLHCHH also undertakes rigorous program evaluations and environmental health research supporting their programs and policy. These complementary research efforts are fully integrated in HUD's evidence-building plans.
- Employee-led knowledge collaboratives share insights and undertake initiatives to advance mission-related common interests, information, and skill development across organizational boundaries.
- HUD makes significant annual investments in the American Housing Survey and other survey data assets to establish a data infrastructure for housing and community development policy, practice, and research.
- HUD routinely enhances data assets through data linkages and makes them available to researchers through data licensing and research data centers.
- HUD's Geocoding Service Center spatially enhances demographic and economic data to facilitate program decisions and improvements, as well as the assessment of fair housing and civil rights impacts—for example, marketing housing to underserved populations, locating new housing projects in accordance with HUD's site and neighborhood standards, and maximizing the use of accessible public and assisted housing units for households who need the particular features of these units.

Opportunities to strengthen organizational learning are available in connection with internal assessment of various projects, as opportunities to conduct systematic "after action reviews" and document lessons learned frequently are carried out. Such methods have been found to improve the efficiency and consistent reliability of processes through better documentation, communication, and process maturity.

Evidence-Building Personnel and Practices

PD&R's research and evaluation staff was funded at 165 full-time equivalents in FY 2021, which included 39 staff in headquarters and the field who support program operations with economic analysis of housing markets and 12 new positions to stand up the Office of the Chief Data Officer. The PD&R staff size and skill mix is marginally adequate for administering evaluation and research activities at current funding levels for the Research and Technology account, as the mandates of the Evidence Act have increased workloads. Dissemination of research findings includes contract support associated with the <u>HUDUSER.gov</u> web portal and online publications. Dissemination of best practices also includes <u>Community Compass technical assistance</u> funded through the Research and Technology account.

Improving data quality, making effective use of administrative data assets, and strengthening HUD's open data program will require significant new investments in data governance and creating an enterprise solution.

PD&R staffing is not adequate to complete all evaluation and research proposals identified for the office in HUD's *Learning Agenda*: not all research contracts could be administered nor all inhouse research opportunities pursued. A National Research Council (2008) review—which can be viewed as an independent capacity assessment that few agencies have available—concluded that PD&R should increase inhouse research.⁸ PD&R efforts since then to increase inhouse capacity have included increasing to about 16 the number of staff with special sworn status for access to restricted Census data,⁹ developing a research data center to facilitate secure access, and leveraging opportunities for data linkages. Certain skillsets such as statisticians and research economists are in short supply. Inhouse researchers first focus on HUD's urgent needs such as developing program parameters, conducting regulatory impact assessments, supporting program office needs, and responding to Congressional requests. Such priorities leave little time for potentially high-value but non-urgent research. A substantial proportion of PD&R staff members with advanced social science degrees are employed in monitoring contract research rather than conducting inhouse research; maintaining contract research certifications requires extensive annual training that further reduces inhouse research time.

Developing Human Capital for Evidence Building

Evidence-building capacity within program activities could be usefully expanded in several directions. First, training in such evaluation principles as logic models, counterfactuals, research design, and randomization would strengthen awareness of the complementary roles of performance monitoring and formal evaluation. Broader availability of reliable administrative data extracts and contextual data, business intelligence systems, and dashboards could support real-time awareness of operational trends, outputs, and outcomes to enable material improvements in performance. Providing skilled assistance with advanced analytics and modeling could strengthen risk analysis and monitoring. Finally, clearer guidance about best practices for incorporating evidence requirements in grant programs would be beneficial.

3. Criteria for Evidence-Building Capacity Assessment

HUD's capacity to generate and use evidence through statistics, evaluation, research, or analysis may be assessed usefully on the basis of five criteria: the extent of coverage of evidence-building activity, quality of data, use of rigorous and appropriate methods, effectiveness of the activities for stakeholders, and independence.

⁸ National Research Council. 2008. "Rebuilding the Research Capacity at HUD." Washington, DC. <u>https://www.nap.edu/catalog/12468/rebuilding-the-research-capacity-at-hud</u>.

⁹ At least 18 HUD staff have obtained Special Sworn Status, including 4 whose status has lapsed. PD&R has 2 more analysts with pending status.

In this section each criterion is applied to the four categories of evidence. The subcriteria used in making the assessments are listed for each criterion. The assessments reflect discussion among HUD career staff with decades of direct experience generating statistics, evaluation, research, and analysis at HUD. The assessments have an element of subjectivity but benefit from input from multiple perspectives and first-hand experience with the strengths and limitations of HUD's capacities in these areas.

The four categories of evidence assessed using the five criteria are summarized in the following table:

Statistics	Evaluation	Research	Analysis
HUD-sponsored surveys, administrative data, data linkages	Program evaluations, program demonstrations, randomized controlled trials, case studies	Descriptive data analysis, inferential data analysis, geospatial analysis, literature reviews, regulatory impact analysis	Policy analysis, performance measurement and analysis

Categories of Evidence Assessed

Coverage

Considerations: Comprehensiveness, appropriateness, targeting

Statistics. The comprehensiveness, appropriateness, and targeting of HUD's statistical, evaluation, research, and analysis activities ensure that such evidence building provides substantial coverage of most programs with annual appropriations. HUD uses standard, recognized methodologies in conducting each of these evidence-building activities and relies on research roadmapping and *Learning Agenda* consultation processes to frequently reassess whether the scope, depth, and focus remain relevant for stakeholders. To improve the comprehensiveness, appropriateness, and targeting of statistical information, data linkage has been a key strategy. Data linkages strengthen the coverage of statistics to encompass policy domains such as health and education that overlap with HUD's core mission. Such linkages include both linkages with administrative data of federal sister agencies and linkages of administrative data with survey data.

Evaluation. Formal program evaluations typically focus on major program policy questions with the most rigorous methods, so programs that are relatively small, stable, or difficult to evaluate may not be evaluated often. HUD has at times missed opportunities to conduct rigorous, large-scale evaluations and inform stakeholders about the impacts and cost effectiveness of some major initiatives.¹⁰ Formal program evaluation also is constrained for programs that have low levels of evaluability because they operate through funding streams rather than defined program activities (for example, block grant programs) or through commitment authority (for example, FHA mortgage insurance and Ginnie Mae guaranties). Evaluation, research, and policy analysis supporting such programs typically have a

¹⁰ NRC, 2008: pages 3–10.

narrower scope, focusing on specific policy issues rather than questions of overall impact or cost effectiveness. Data collection also may be limited to administrative data, or to purchases of commercial datasets related to mortgage markets.

Research. The coverage of statistical, evaluation, research, and analysis activities is primarily guided by the stakeholder-informed research prioritization of HUD's learning agendas. This process prioritizes research that is more pertinent to evolving evidence-building needs rather than systematically undertaking evaluation or other research across HUD program areas according to a fixed schedule or structured comprehensive framework. Should increased evaluation resources become available, there is an opportunity to conduct a systematic assessment to increase the uniformity of coverage with regard to the National Research Council's 2008 recommendation for PD&R to "regularly conduct rigorous evaluations of all of HUD's major programs."¹¹ Generally, HUD has had sufficient financial and staff resources to complete only a fraction of research proposals featured in past Research Roadmaps.

Analysis. The coverage of analysis activities for the purposes of program monitoring and performance management, while good, has potential for improvement. The HUDstat performance management system that HUD used for several years and was recognized as an advance reflecting leadership's commitment to data-driven decision-making¹² was subsequently mothballed, and a new system remains under development. Performance metrics and milestones could be enhanced by selection of more outcome metrics and contextualization of administrative data with external data sources, which could better support targeting. Identification of common data elements across program activities and standardization to the extent possible would make enterprise data more feasible and increase the utility of administrative data for improving program management and building evidence. The Office of the Chief Data Officer has identified such standardization as an early priority, beginning with a catalog of standard tenant data elements that will facilitate future data collections, and supporting a data inventory that will make the sources of data transparent for users.

Quality

Considerations: Availability, completeness, timeliness, accuracy, integrity, utility

Statistics. Relating to the quality of statistical evidence, the national survey data that HUD and the Census Bureau collect are quite good as the agencies have jointly made numerous improvements in recent years. The National Research Council (2008) judged that providing public-use datasets is one of PD&R's most important functions and that the American Housing Survey even then was one of the federal government's richest datasets. Most of the subcriteria for this element—availability, completeness, accuracy, integrity, and utility—are free of notable deficiencies. The Census Bureau and HUD work closely to make improvements to development and cognitive testing of survey questions,

¹¹ *Ibid.* See page ES-2.

¹² HUDstat was a PerformanceStat or "stat" process in which ongoing, data-driven meetings involve agency leaders in identifying key challenges, diagnosing problems, devising solutions, and tracking results. See pages 27 and 30 in Feldman. Andrew, 2017. "Strengthening Results-Focused Government: Strategies to Build on Bipartisan Progress in Evidence-Based Policy." Washington, DC: Brookings. https://www.brookings.edu/wp-

content/uploads/2017/01/es 20170130 evidencebasedpolicy.pdf.

sampling, survey field work, weighting, and making publicly available data from a number of national surveys. Surveys sponsored by HUD and conducted by the Census Bureau include the American Housing Survey, the Rental Housing Finance Survey, the Manufactured Housing Survey, and several other surveys tracking monthly, quarterly, or annual changes in the nation's housing. These surveys have been enhanced in recent years through engagement with data users, addition of topical modules, greater use of technology, improved statistical rigor, and much more matching to administrative records. HUD and the Census Bureau collaborate extensively on the complex process of preparing survey data for public release in timely fashion—usually about 12 months for a major survey such as the AHS. Processing steps include extensive quality checks, missing data imputation, weighting, and merging administrative data. Survey administrators need to take extra care in releasing data when there is a disruption in data collection, as recently occurred when the COVID-19 pandemic disrupted reporting on homeownership rates. Interagency collaborations to support rapid review and release of the experimental Pulse survey data during the pandemic offer lessons for other surveys. HUD also collaborates with the Census Bureau to make special purpose products available, such as monthly Housing Market Indicator reports and enhanced tabulations of the American Community Survey that are essential for Consolidated Planning assessments.

Statistics based on administrative data are fairly good with respect to utility, objectivity, and integrity. HUD is notable for the data it collects on both the 4.6 million households with rental assistance and the more than 8 million households with FHA-insured mortgages. With these data, HUD has made substantial progress in interagency collaborations to match tenant data for the Department's largest public and assisted housing programs with Census surveys, National Center for Health Statistics surveys, and federal administrative data. Tenant data are fairly complete, and integrity of tenant incomes is supported by the availability of income data through HUD's Enterprise Income Verification system. Yet weaknesses in tenant data include incomplete address records that hinder geospatial analysis and lessfrequent and modified reporting requirements for Moving to Work (MTW) agencies due to the various flexibilities that MTW agencies can implement. When high-frequency transactional data are not collected on the same individuals, the potential value of prediction methodologies such as Artificial Intelligence systems may be limited. Administrative data also have blind spots for such important things as what happens to households after they leave assistance or exit the FHA program. HUD is undertaking several targeted studies of post-exit outcomes using data linkages; such research could inform improvements to tenant data collection.

Administrative data related to the Community Development Block Grant and other block grant programs are good for a general understanding of investments and approximate location of those investments, but improvements are warranted to support stronger evaluations of these flexible programs. Data on HUD programs serving Native American tribes are also very limited. The Homeless Management Information Systems operated by homeless service providers provide crucial individual-level data on system use, including prior and subsequent stays in specific programs. HUD's access to these critical data, however, is limited to annual national summary reporting because of privacy considerations. The Department also has additional work to do, under the oversight of the Chief Data Officer and the Data Governance Board, in complying with open data requirements of various statutes. Important non-HUD programs in which HUD has substantial interest, such as the Low-Income Housing Tax Credit and Opportunity Zones, have improved administrative data but would benefit from substantial further investment by HUD and the Department of the Treasury. Further advances for evidence-based policy in these critical areas would require significant improvements in coordination and possibly a statutory waiver to permit use of federal tax information for such purposes.

HUD's *Learning Agenda*, like this *Capacity Assessment*, is a standalone component of HUD's *Strategic Plan*. The *Learning Agenda* includes, under the heading Enhanced Data and Methods, 14 proposed projects to strengthen the quality, utility, and access to HUD data assets. The *Learning Agenda* also documents deficiencies in data availability in a number of important areas that HUD is seeking to address:

- Low-Income Housing Tax Credit property addresses
- Opportunity Zones investments, activities, and outputs
- Post-exit outcomes of assisted renters
- Locations of activities funded by CDBG and HOME
- Energy consumption and expenditure data for public and assisted housing
- Lead hazard control grant administrative data
- Picture of Single-family FHA-insured households
- PHA waiting lists and admissions preferences
- Sexual orientation and gender identity data

Evaluation. The quality of HUD's evaluation and demonstration work is very good. As provided by HUD's Program Evaluation Policy Statement, ¹³ the Department uses strong research designs when possible and makes the resulting reports and data available for further analysis. Since its founding HUD has supported a number of important demonstrations and other evaluations—employing rigorous experimental methods—that have led to major policy changes. The Experimental Housing Allowance Program demonstrations of the 1970s and subsequent research on the use of tenant-based rental assistance were instrumental in the creation and subsequent changes to what is now the largest housing assistance program run by HUD, the Housing Choice Voucher program. In recent years, data from such studies as Moving To Opportunity (impact of moving from high poverty to low poverty neighborhoods), Administrative Fee study (the cost to administer the Housing Choice Voucher program), and Family Options (studying interventions to address family homelessness) have been utilized by numerous researchers and policymakers. HUD makes these data available for further analysis through a combination of access at Census research centers, direct data licenses with researchers, and cooperative agreement research.

¹³ Office of Policy Development and Research, HUD. Published in 86,154 *Federal Register* 44738 , (August 13, 2021). Docket No. FR–6278–N–01, FR Doc. 2021-44738. <u>https://www.federalregister.gov/d/2021-17339</u>.

Research and Analysis. The quality of the Department's research and analysis efforts is also good. HUD has a core of research staff with skills well-suited for conducting a limited number of research studies and analyses with timeliness, accuracy, integrity, and utility. Availability of such work remains a constraint, however, because advanced research and analysis skillsets are more scarce than optimal levels.

Methods

Considerations: Range, Rigor, Suitability

Statistics. The methods used for HUD's statistics are very good in terms of range, rigor, and suitability. National surveys, targeted surveys, centralized administrative data collection, locally retained administrative data (Homeless Management Information Systems), and other collections are all wellsuited for specific contexts. Statistical data often are enhanced with geospatial information and several data linkage strategies and are released in a variety of open data products accessible to practitioners, policymakers, and researchers, subject to privacy protections. HUD also is developing an agency-wide Customer Experience (CX) capability.

Evaluation. For evaluation as well, HUD uses a spectrum of research, data collection, and analytic methods selected to address specific evidence-building needs. The HUD Program Evaluation Policy Statement¹⁴ commits the Department to using the most rigorous methods that are appropriate to the evaluation questions and feasible within budget and other constraints, covering impact evaluations, implementation or process evaluations, descriptive studies, outcome evaluations, and formative evaluations, and both qualitative and quantitative approaches. Program demonstrations using gold-standard random control trial methods have been central to PD&R's research portfolio for decades and have become dominant in recent years. Evaluations generally must use a treatment group and counterfactual when feasible to isolate the program impacts from other factors. HUD's guideline for rigor also requires that researchers seek to understand and correct for implicit bias in the formulation of research questions and methods.

Research and Analysis. Research and analysis activities as well are covered by the Evaluation Policy's guidelines about rigor, independence, and ethics.

HUD's *Learning Agenda: Fiscal Years 2022–2026* discusses a wide range of methods that encompass all four categories of evidence:

- Program demonstrations
- Quasi-experimental evaluations
- Econometric analysis
- Descriptive statistical analysis
- Case studies
- Ethnographic methods

¹⁴ Ibid.

- Literature reviews and systematic reviews
- Performance metrics and dashboards
- Surveys
- Advanced analytics
- Behaviorally informed program evaluation

Effectiveness

Considerations: Policy influence, program guidance, advances in theory

HUD's statistics, evaluations, research, and analytics are meeting substantial needs of stakeholders, with particular strengths in the areas of homelessness policy and assisted housing policy. The National Research Council's (2008) review of PD&R's research and evaluation activities concluded that most of the work was "high quality, relevant, timely, and useful" and made "valuable contributions in several notable areas" but that inadequate funding had significantly eroded capacity to perform effectively.¹⁵ PD&R research efforts since the NRC review have sustained the quality of research, improved the availability and usefulness of data products, strengthened the emphasis on gold-standard experimental methods, involved stakeholders in establishing research priorities, and established a program evaluation policy to institutionalize consistent practices. These enhancements have been supported by sustained funding increases that began in FY 2010. PD&R's combined appropriation for core research, evaluations, and demonstrations totaled \$72.2 million for FY 2021, representing a real increase of more than 20 percent from average funding during the 3 years (FY 2006–FY 2008) preceding the NRC review.¹⁶

Statistics. HUD-sponsored statistical products such as the American Housing Survey (AHS) have provided the core of the nation's housing data infrastructure for decades, supporting reporting to Congress on the unmet need for affordable and assisted housing, providing data on structural characteristics and housing finance, and through its unique longitudinal design, information on conditions, use, and affordability of the housing stock. HUD is using an AHS research module to develop a preliminary Housing Insecurity index, which after testing and refinement may provide a major theoretical advance in the ability to associate housing problems with a range of household outcomes and the capacity to include a transferable module of housing insecurity questions in a variety of other surveys similar to the USDA Food Insecurity module.

Evaluation. HUD's evaluation activities have good effectiveness. A majority of HUD managers who responded to GAO's 2020 survey reported that they have systematically tracked implementation of recommendations from evaluations (see exhibit 5, question 22i). Major randomized controlled trials over the years have provided seminal evidence about the usefulness of tenant-based rental assistance, tenant mobility policy, and permanent housing as a solution for family homelessness, transforming housing and community development legislation. Policy domains that have unmet needs include

¹⁵ National Research Council. *Op. cit.* See page ES-1.

¹⁶ Totals for PD&R's Research and Technology account, excluding funding for University Partnerships and Technical Assistance. The FY 2006–FY2008 appropriations were \$37.2 million, \$50.1 million, and \$50.8 million in current dollars

intractable, "wicked" problems such as the housing affordability crisis, housing discrimination, selfsufficiency, community development, regulatory barriers, and disaster recovery and resilience. Such issues may bring further challenges such as a lack of reliable data, unacceptability of random assignment methods, or serious difficulty in establishing a counterfactual for evaluation; addressing such challenges satisfactorily may consume substantial resources over the Learning Agenda timeframe.

Generally, HUD's evidence building is meeting the needs of stakeholders. Evaluations and other research products are disseminated appropriately, and the iterative outreach process of research roadmapping has given stakeholders the opportunity to communicate emerging issues and unmet needs in evaluation and research priorities, including needs identified through lived experiences of HUD beneficiaries.

Research and Analysis. Research and analysis activities have fairly good effectiveness as well. Policy and program constraints, however, may limit responses to such evidence in some cases. There is potential to increase effectiveness of performance management by more systematically using outcome measures that are supported by metrics guided by program logic models, and by increasing availability and use of business intelligence systems for managers. These issues are discussed in relation to survey results shown in exhibits 2, 3, and 5.

Independence

Considerations: Organization, policy, culture

Statistics. The independence of HUD's statistics is excellent for survey data and good for administrative data. HUD's partnership with the Census Bureau for major surveys provides highly qualified external review of decisions about the data, and the availability of these data through online table creators and dataset downloads ensures transparency about published reporting of the data. PD&R also releases administrative data for HUD-assisted households as user-friendly summary files and as public-use microdata (PUM) files and provides restricted-use access to external researchers through data licenses.

Evaluation. The centralization of most major program evaluation for the Department within the independent office of PD&R serves well to ensure independence of HUD's evidence-building activities. The HUD Program Evaluation Policy Statement includes commitments to transparency and independence that ensure that the most critical evidence-building function, evaluation, is conducted without regard to whether findings are positive and are reported in a clear way. PD&R protects independence and objectivity in the design, conduct, and analysis of evaluations through competitive award to researchers who are free of conflicts of interest. The transparency policy provides that HUD will release methodologically valid evaluations without regard to the findings. Additionally, transparency is safeguarded by contract language that allows researchers to publish independently even if HUD should choose not to publish, for example, if HUD should have concerns about the validity of findings. HUD's Evaluation Policy also provides that HUD will, where possible, archive administrative and evaluation data for secondary use by interested researchers.

Research and Analysis. Research and analysis have guarantees to independence similar to those of evaluation. HUD staff are permitted to publish the results of their scholarship and analysis in any forum, so long as they do not claim to speak for the Department. PD&R also publishes a peer-reviewed journal,

Cityscape, that provides a venue for multi-disciplinary, independent contributions from internal and external authors about a wide range of housing and community development issues.¹⁷ The results of analysis conducted for performance management purposes are published in HUD's Annual Performance Reports¹⁸ and on the Performance.gov website.

4. Perceptions of HUD Managers about Evidence-Building Capacity

HUD Senior Manager Survey

PD&R undertook primary data collection for the *Capacity Assessment* by conducting a survey of HUD senior managers during late August and early September 2020. The survey instrument was developed under the oversight of the Evaluation Officer by a working group that included senior program evaluators and analysts involved in developing HUD's learning agenda.

The core of HUD's survey comprised 17 affirmative statements that collectively reflect a well-rounded capability to generate and use evidence. The online survey was administered to a purposive sample of senior managers who have responsibility for one or more HUD programs, as well as additional managers who have responsibilities involving evidence building. Managers with responsibility for support functions were not included in this exploratory survey because their relationship to evidence building is expected to be somewhat different. Eighteen managers from across the Department responded to the survey, for a response rate of 56 percent.

Participants were asked to report whether and how strongly they agree that each statement reflects *their program.* The results suggest that HUD managers perceive that the Department has a moderately good baseline capacity in these areas. Across all 17 statements (denoted Q1–Q17), an average of 20 percent of respondents "strongly agree" and another 41 percent "agree" with the statements, totaling 61 percent who strongly agree/agree. Several questions about data and evaluation received "not applicable" responses from managers engaged in budget, strategic planning, or evaluation as their primary program activity. The results of the HUD Senior Manager survey are presented in exhibits 3, 6, and 8 below.

GAO Federal Managers Survey

Concurrently with HUD's survey effort, the Government Accountability Office (GAO) administered its annual government-wide survey of federal managers. The 2020 GAO Federal Managers Survey (exhibits 1, 2, 4, 5, and 7) placed a heavy emphasis on the use of performance data and evaluation for evidence building as envisioned by the Evidence Act. GAO has made available the results on "government performance and management issues" collected for individual agencies such as HUD.¹⁹

¹⁷ See <u>https://www.huduser.gov/portal/periodicals/cityscape.html</u>.

¹⁸ See <u>https://www.hud.gov/program_offices/cfo/reports/cforept</u>.

¹⁹ Government Accountability Office. 2021. "Supplemental Material: 2020 Federal Managers Survey: Results on Government Performance and Management Issues." <u>https://www.gao.gov/products/gao-21-537sp</u>.

In this section, the results of the HUD survey and the GAO survey are considered in tandem as they pertain to three broad domains of evidence-building capacity:

- Effective Data for Program Management—accessible, reliable, and useful data for use in monitoring and measuring performance of programs.
- Effective Evaluation for Policy Development—program demonstrations, evaluations, and research that provide rigorous evidence about program implementation, outcomes, impacts, and cost-effectiveness.
- Staff Skills and Tools for Evidence Building—human capacity to build and apply appropriate tools and methods to analyze data, statistics, and performance metrics for program improvement, and to understand the implications of evaluations for program management and policy.

Effective Data for Program Management

Together, GAO's survey and HUD's survey paint a somewhat positive picture of Effective Data for Program Management.

In GAO's 2020 Manager Survey, about 73 questions relate primarily to the Effective Data for Program Management topic. A selection of 39 of these questions—which include a substantial emphasis on performance data—is presented in Exhibits 1 and 2.

Exhibit 1 shows that similar proportions of HUD managers report (for questions 24a–24c) having the three main types of information available for use in their program management: administrative data, statistical data, and research and analysis. These information sources each received strong combined positive responses of "very great extent" or "great extent" (24.0–26.4 percent) in the GAO survey. A smaller fraction of managers provided negative responses, indicating that such information sources are not available for their program activities, with research and analysis being most frequently lacking with 14.5 percent combined negative responses.

Managers use such information for a wide variety of program management purposes (questions 25a–25m). Combined positive responses ranged from a low of 18.9 percent for allocating resources (25f) to a high of 28.4 percent for providing context for or explaining performance results (25d). The strongest combined negatives were using available data for allocating resources, at 17.1 percent, followed by refining program performance measures, at 13.7 percent (25e). The last two questions shown in Exhibit 1 address institutional matters. Item 27f concerns the availability of measures and controls to protect data security and privacy and received combined positive responses totaling 48.4 percent. Question 27g assesses perceptions of top leadership commitment to using a variety of data and information sources for making program and policy decisions. Responses to this question in 2020 reflect combined positive responses of 23.0 percent.

HUD Capacity Assessment

Exhibit 1. HUD Manager Responses to GAO on Information Sources and Usage for Program Management, 2020 (n = 90)

24a. [Types of information available for program]: Administrative data 112 128 154 56 19 50.0 24b. [Types of information available for program]: Statistical data 110 13.4 13.8 30 13.8 30 49.7 24c. [Types of information available for program]: Research and analysis 106 13.8 8.9 8.2 6 52.2 25a. [Use made of such information]: Providing context about the problem the program is designed to address 72 18.8 15.5 2.7 2 54.6 25b. [Use made of such information]: Developing program priorities and goals 107 12.7 12.5 16 1 54.5 25c. [Use made of such information]: Explaining or providing context for performance results 13 13.6 9.5 11.2 12.5 54.6 25e. [Use made of such information]: Explaining or providing context for performance measures 13 13.6 9.5 11.2 54.6 25f. [Use made of such information]: Identifying opportunities to improve program performance 13.6 9.5 11.2 52.1 54.6 25f. [Use made of such information]: Identifying opportunities to reduce, eliminate or better manage duplicative activities 16.4 3.4
24c. [Types of information available for program]: Research and analysis 106 13.8 8.9 82 52.2 25a. [Use made of such information]: Providing context about the problem the program is designed to address 12 18.8 15.5 2.7 2 54.6 25b. [Use made of such information]: Setting or revising program priorities and goals 17.8 16.7 3.8 5 54.5 25c. [Use made of such information]: Developing program strategy 67 20.7 13.5 3.7 2.4 52.1 25d. [Use made of such information]: Refining program performance measures 13 13.6 9.5 11.2 5 54.6 25f. [Use made of such information]: Refining program performance measures 13 13.6 9.5 11.2 5 54.6 25g. [Use made of such information]: Identifying opportunities to improve program performance 13 13.6 9.5 11.2 5 54.6 25f. [Use made of such information]: Identifying opportunities to program approaches with others 15.5 5.7 1.2 52.1 25i. [Use made of such information]: Identifying opportunities to reduce, eliminate or better manage duplicative activities 1.6.9 18.1 6.2 51.0
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reduce, eliminate or better manage duplicative activities 25k. [Use made of such information]: Coordinating program efforts 51, 184, 159, 487, 53,3
within your agency or with other external entities
251. [Use made of such information]: Identifying opportunities to support the program's activities to respond to the COVID-19 pandemic 6.0 19.0 12.1 5.12.4 55.5
27f. My agency has information systems and processes in place to protect the privacy and security of its data 15.1 33.3 18.9 6.8 1.1 38.3
27g. My agency's top leadership demonstrates a strong commitment to using a variety of data and information in decision making
0% 20% 40% 60% 80% 10
Very great extent Great extent Moderate extent Small extent No extent Not Applicable or Missing

Exhibit 2 summarizes some of the GAO survey's extensive coverage of performance measurement issues and use of performance information. Most of the questions shown received strong positive responses, usually with well over 20 percent of respondents choosing "Very great extent" or "Great extent." Response patterns reflect strengths in several areas:

- availability of a variety of performance measures (3b, 4a-4g)
- use of performance information for program strategy, resource allocation, identifying performance problems, and taking corrective actions (6d–6g)
- routinely communicating performance information to stakeholders (8c)
- periodically reviewing performance information with senior managers (8d)
- strong leadership commitment to achieving results (14a)

Seven of these 20 questions drew strong negative responses from HUD managers, with "Small extent" or "No extent" together exceeding 20 percent of responses. These seven questions suggest needs for improving evidence-building capacity in these areas, complicated by 4a and 8c, which each drew both strong positives and strong negatives:

- availability of performance measures of output costs and of equity (4a, 4f)
- routinely communicating performance information to stakeholders (8c)
- leadership commitment to using performance data for decisionmaking (14b)
- routine leadership communication of performance information (14c)
- leadership attention to using performance information for management decisionmaking (14d)
- increasing use of performance information for management decisionmaking over time (14e)

Exhibit 2. HUD Manager Responses to GAO on Performance Information for Program Management, 2020 (n = 90)

3b. There are meaningful performance measures for my program(s)

4a. We have performance measures that tell us the amount of resources being used to develop, maintain or deliver the products or..

4b. We have performance measures that tell us how many things we produce or services we provide (Output measures)

- 4c. We have performance measures that tell us about the quality of the products or services we provide (Quality measures)
- 4d. We have performance measures that tell us if we are operating efficiently (Process measures)
- 4e. We have performance measures that tell us whether or not we are satisfying our customers (Customer service measures)
- 4f. We have performance measures that tell us how the products or services we provide are distributed across different populations...

4g. We have performance measures that would demonstrate whether or not we are achieving our intended results (Outcome measures)

- 6d. [We use performance management information for:] Developing program strategy
- 6e. [We use performance management information for:] Allocating resources
- 6f. [We use performance management information for:] Identifying program problems to be addressed
 - 6g. [We use performance management information for:] Taking corrective action to solve program problems
- 8c. I communicate performance information about my program(s) on a routine basis to internal and external stakeholders
- 8d. The individual I report to periodically reviews with me the results or outcomes of the program(s)
 - 13e. My agency is investing in resources to improve the agency's capacity to use performance information
- 14a. My agency's top leadership demonstrates a strong commitment to achieving results
- 14b. My agency's top leadership demonstrates a strong commitment to using performance information to guide decision making

14c. My agency's top leadership communicates performance information throughout the organization on a routine basis

14d. My agency's top leadership pays attention to the use of performance information in management decision making...

14e. Compared to three years ago, my agency's top leadership pays more attention to the use of performance information in...

Very great extent

20.2		34.4		21.5	6.9	17.0	
11.9	20.7	15.4	19.0	8.7		24.4	
11.5	20.7	13.4	19.0	0.7		27.7	
24.3		39.4		10.8	8.5	17.0	
14.3	32.5	5	18.2	14.2	2 2.3	18.6	
12.4	29.8		19.5	10.5	8.6	19.2	
12.6	6 25.6		25.1		6.4	18.6	
11.9	23.0	16.9	11.0	14.2		23.1	
23.2		34.7		16.0	5.6 <mark>3.5</mark>	17.0	
15.7	27.0		19.2	5.8 7.1		25.2	
17.0	17.0 22.0 22.2 26.2		20.3 7.3 5.9 14.3 9.5 3.5		2	27.6 24.3	
22.2					.6		
21.6		28.0	15.2	6.82.5	; 2	26.0	
18.7	18.7 30.4 19.4 35.8		23	9.0	13.3	7.4 7.4	
19.4				22.2	11.8	<mark>6.1</mark> 4.7	
8.9	24.6	15.2	13.7	4.0	33.6	5	
17.4	:	35.2		23.4	10.2	7.0 6.9	
16.8	21.5		25.0	17.1	5.4	14.3	
9.5	23.8	25.	1	26.1		9.8 5.7	
10.8	19.2	22.7		20.5	5.9	20.9	
12.7	19.9	20.4	11.		L.	20.7	
%	20%	40%	60		80%	10	

Great extent Moderate extent

Small extent No exte

■ No extent ■ Not applicable or Missing

HUD's survey of senior managers included six questions addressing Effective Data for Program Management (exhibit 3). For these six questions, an average of 56 percent of the senior manager respondents chose combined positive responses of strongly agree or agree.

Three of these questions, however, also generated some of the largest combined negative responses. Disagree or strongly disagree accounted for 28 percent of responses about availability of outcome data for households and individuals (Q1); 39 percent of responses about availability of outcome data for communities (Q2); and 33 percent of responses about business intelligence (BI) systems and data for tracking program performance (Q10). Q10 also accounted for the largest proportion of "strongly disagree" responses, at 11 percent, suggesting pockets of substantial need for better business intelligence data and systems.

Although such BI systems are available in the Department, individual managers may not be aware of their availability or capabilities, or linkages to necessary data may need to be created. Several efforts are underway to improve capacity for using BI systems. The Office of the Chief Information Officer offers BI desktop applications as HUD-standard software for staff who request it and offers a suite of courses on how to use it effectively. To complement such technological skills, the Chief Data Officer is developing a data skills program that includes data management, data literacy, and data quality improvement.

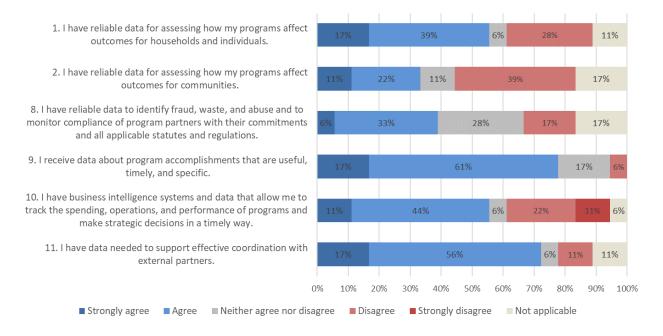


Exhibit 3. Senior Manager Responses on Effective Data for Program Management, 2020 (n = 18)

Taken together, the GAO survey and HUD survey suggest that the Department's moderately strong performance management capabilities could be strengthened by investments in better outcome data about communities and individual beneficiaries—including measures of equal opportunity and equity— and by better integration of supporting metrics that provide context and enable alignment of program outputs and outcomes with the resources consumed, consistent with program logic models.

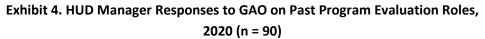
Limitations of the availability, robustness, and quality of administrative data generally pose an important constraint for evidence-based policy and programs. Upgrading administrative data requires attention to data infrastructure—not just information technology infrastructure. The robustness of administrative data collections may be constrained by statutory authorization or by concerns of excessive reporting burden for HUD's program partners—especially when collection of outcome data is considered. Data systems may lack safeguards to prevent submission of erroneous data or may suffer from chronic underreporting or missing data. Funding for development, modernization, and enhancement of administrative data systems has been limited, due in part to the persistently high cost of basic operations and maintenance of these systems. In many cases, administrative data could be strengthened substantially by providing dynamic linkage with external data sources and advanced analytic capabilities, but it is crucial to collect the needed data elements. For such reasons, a key component of the CDO's Data Program is improving data governance. Data governance provides guidance for data decisions involving policies, investments, and orchestration of people, process, and technology. Robust administrative data capabilities are essential for effective business intelligence systems and research.

Effective Evaluation for Policy Development

GAO's Manager Survey included numerous questions assessing managers' perceptions about evaluation. Unfortunately, only 43.5 percent of HUD managers responded that they had at least a small extent of familiarity with evaluation at the Department, with correspondingly large fractions of "not applicable" or missing responses to subsequent questions about evaluation (exhibit 5, 17a).

Even smaller fractions of managers responded affirmatively to questions about past experience with evaluation activity either as an evaluator or evaluation client (exhibit 4). Only 7.5 percent reported managing evaluators (18b), and 14.2 percent reported serving on an evaluation team (18d). Almost 20 percent, however, reported using the results of evaluations to make performance improvements (18e).





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The low response rates for GAO's survey questions about evaluation probably result from two main factors. First, significant numbers of HUD managers may have declined to respond or chosen "not applicable" for evaluation questions in GAO's survey because they are employed in support offices or functions such as budgeting, human resources, information technology, or the Inspector General, and thus do not operate "programs." Second, substantial numbers of staff are employed in program offices such as the Federal Housing Administration or Ginnie Mae that receive resources in the form of commitment authority rather than spending authority. Such program areas are subject to annual financial reporting requirements and have not been major clients for formal program evaluation in the recent past.

Among respondents in the GAO survey who reported some degree of familiarity with program evaluation (exhibit 5, 17a) and completed followup questions (17b–22i), combined positive responses were generally more prevalent than combined negatives.

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Exhibit 5. HUD Manager Responses to GAO on Effective Evaluation for Policy Development, 2020 (n = 90)

				1
17a. I am familiar with program evaluation(s) at my agency.	4.8 14.6	14.0 10.1	. 27.1	29.4
17b. I have access to program evaluation(s) I need to manage my program(s).	3.8 15.3	11.4 8.6 2.	58.2	
19a. [Evaluation results are used for]: Implementing changes to improve program performance	5.8 13.4	10.2 6.0 2. <mark>3</mark>	62.4	
19b. [Evaluation results are used for]: Adopting new program approaches, operations, or processes	5.8 13.4	10.2 6.2 3.4	61.0	
19c. [Evaluation results are used for]: Sharing effective program approaches or lessons learned	8.1 15.8	6.7 8.41.1	. 59.9	
19d. [Evaluation results are used for]: Allocating resources within the program	4.6 13.9	11.4 5.4 3.5	61.1	
19e. [Evaluation results are used for]: Explaining or providing context for performance results	4.4 16.6	5.9 8.3 3.5	61.2	
19f. [Evaluation results are used for]: Informing the public about the program's performance, as appropriate	2.96.4 4.5 10	.3 6.7	69.2	
20a. [For your programs]: Evaluations addressed issues important to key stakeholders	6.9 9.8 6	.9 <mark>4.8</mark> 1.1	70.6	
20b. [For your programs]: Evaluations were completed without undue influence	7.5 12.9	2.7 4.1	72.8	
20c. [For your programs]: Evaluations were technically rigorous (i.e., they produced accurate, valid, and high quality evidence)	5.9 11.1 2. <mark>7</mark>	4.1 2.3	74.0	
20d. [For your programs]: Evaluation results had clear implications for program improvement	6.3 12.9 2	8 6.3 <mark>2</mark> .3	69.4	
20e. [For your programs]: Evaluation results were delivered in time to be useful	5.1 14.2 1	. <mark>6 6.4</mark> 2.3	70.5	
20f. [For your programs]: Evaluation recommendations were feasible to implement with existing resources	4.6 13.6 1.e	5 7.6 <mark>1</mark> .1	71.6	
22a. [About evaluations of your program]: Agency top leadership was committed to using evaluations	2.2 12.9 1. <mark>6</mark> 4	. <mark>6</mark> 2.6	76.2	
22b. [About evaluations of your program]: Congress supported the use of evaluations	. <mark>7 6.4 4.6</mark> 0.5		84.8	
22c. [About evaluations of your program]: Evaluations of my program were guided by an agency evaluation plan	1.7 12.7 3.6 <mark>2</mark>	. <mark>5</mark> 2.5	77.0	
22d. [About evaluations of your program]: Evaluations were guided by agency evaluation policies	1.7 12.7 3 <mark>.62</mark>	<mark>5 2</mark> .1	77.4	
22e. [About evaluations of your program]: Evaluations involved consultation with key staff in my program	5.4 8.3 8.5	5 2 <mark>.32</mark> .7	72.8	
22f. [About evaluations of your program]: Evaluations involved consultation with key external stakeholders	1.7 11.3 3. <mark>1</mark> 06		82.3	
22g. [About evaluations of your program]: Disagreements among o. stakeholders were easy to resolve	. <mark>65.2</mark> 6.9 <mark>1</mark> .6		85.8	
2h. [About evaluations of your program]: Evaluation results were made easily accessible and available to the public, as appropriate	<mark>7 8.3 3</mark> .1 1.6		84.0	
22i. [About evaluations of your program]: My program systematically tracked the implementation of evaluation recommendations	D.6 12.7 5.4	3. <mark>6</mark>	77.9	
C)% 20	0% 40	% 60% 8	0% 10

The responses to the GAO question 17b, "access to program evaluations needed to manage my program," are worth noting. This question received combined negative responses of 11.3 percent, suggesting that a significant fraction of HUD managers have an unfulfilled need for a program evaluation. (Omitting not applicable and missing responses would increase this figure to 27 percent of responding managers.) This perceived need for evaluation may be related to the elevated level of negative responses to 19f regarding use of evaluation results to inform the public about program performance.

HUD's Senior Manager survey included six questions related to the Effective Evaluation topic (exhibit 6). For these six questions, an average of 53 percent of respondents selected positive responses of strongly agree/agree.

One question about data and evidence to improve program targeting, Q7, had significant negative responses of 28 percent. It should be noted that the wording of Q7 applies to data capacity about as much as it does to evaluation capacity.

Three other questions in exhibit 6 also show negative responses exceeding 20 percent. These data suggest that lack of evidence about cost effectiveness (Q4) and lack of evidence about the impact of changes in program policy (Q5) are areas of concern for some senior managers. Such concerns point to a potential need for a systematic assessment of evidence-building needs across programs. Some senior managers also expressed a lack of influence over HUD's research agenda (that is, the *Learning Agenda*; Q12). Although HUD's program offices were engaged at multiple points in developing the *Learning Agenda* and past research roadmaps, it is possible that opportunities to participate were not broadly shared within all components of program offices. HUD will review the internal stakeholder participation process supporting future iterations of learning agenda development to ensure that the evidence-building needs of diverse components are captured.

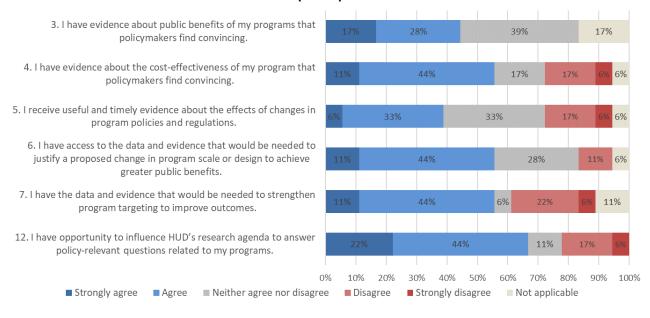


Exhibit 6. Senior Manager Responses on Effective Evaluation for Policy Development, 2020 (n = 18)

Staff Skills and Tools for Evidence Building

Exhibit 7 presents HUD's results for 18 questions from the GAO Manager Survey that relate staff skills and tools for evidence building.

Combined negatives exceeded 20 percent of all responses for two questions: agency investment to ensure that performance information is of adequate quality (13c); and staff with the skills to collect, analyze, and use performance information (13d).

If not applicable and missing responses are ignored, then combined negatives exceed 20 percent for several additional questions. Although these items suggest potential pockets of need, in each case combined positive responses exceeded combined negatives, reflecting substantial variation across the Department:

- investing to improve the agency's capacity to use performance information (13e)
- quarterly performance reviews include staff with relevant knowledge to facilitate problem solving and identify improvement opportunities (16e)
- program staff receive training in program evaluation (21d)
- agency staff (27c) and program staff (26a) with skills to collect, analyze, and use statistics, research, and analysis
- agency analytical tools (27b) and program staff access to such tools (26b) to collect, analyze, and use statistics, research, and analysis
- agency investment to improve capacity to collect, analyze, and use statistics, research, and analysis (27d)
- agency staff with skills to integrate findings from performance measurement, program evaluations, and additional types of information (27e)

The large proportions of middling "moderate extent" responses to several questions—about staff skills (8b, 13d) and access to analytical tools to collect, analyze, and use performance information (8a) suggest there may be potential to achieve significant gains in capacity at relatively modest cost. Several efforts are underway to improve capacity for using BI systems. The Office of the Chief Information Officer offers BI desktop applications as HUD-standard software for staff who request it and offers staff a suite of courses on how to use it effectively. This effort is complemented by new OCDO data program training being developed to strengthen data literacy and data management skills needed to populate BI systems and use evidence effectively.

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Exhibit 7. HUD Manager Responses to GAO on Staff Skills and Tools for Evidence Building,

2020 (n = 90)

3c. Program staff and I have a shared understanding of the 14.4 15.9 definitions used to measure performance 8a. I have access to the analytical tools needed to collect, analyze, 38.0 15.6 1. and use performance information 8b. Staff involved in the program(s) collectively have the knowledge 36.5 11.6 1.17.2 and skills needed to collect, analyze, and use performance... 13c. My agency is investing the resources needed to ensure that its 24 9 22 0 21.6 performance information is of sufficient quality 13d. My agency has staff with the knowledge and skills needed to 13.3 32.4 collect, analyze, and use performance information 13e. My agency is investing in resources to improve the agency's 15 2 33.6 capacity to use performance information 16b. [About quarterly performance reviews]: My agency has the capacity to analyze the performance information needed for these... 10.0 4.3 2.3 81.7 16e. [About quarterly performance reviews]: These reviews include 1.7 6.5 4.4 3.2 84.2 staff with relevant knowledge to facilitate problem solving ... 21a. Program staff have the skills necessary to conduct program 10.5 63.0 14.7 50 12 evaluations 21b. Program staff have the skills necessary to understand program 63.0 10.0 evaluation methods, results, and limitations 21c. Program staff have the skills necessary to implement evaluation 17.4 9.3 63.0 1.2 recommendations 21d. Program staff receive training in program evaluation (e.g., 65.4 formal classroom training, conferences, on the job training) 26a. [About statistics, research and analysis]: Program staff 15.3 54.7 collectively have the knowledge and skills needed to collect,... 26b. [About statistics, research and analysis]: I have access to the 14 5 53.6 analytical tools needed to collect, analyze, and use these... 27b. [About statistics, research and analysis]: My agency has the 24.5 21.6 30.9 1 1 analytical tools needed to collect, analyze, and use these... 27c. [About statistics, research and analysis]: My agency has staff 28.1 14.3 28.4 with the knowledge and skills needed to collect, analyze and use ... 27d. [About statistics, research and analysis]: My agency is investing 21.9 44.6 resources to improve its capacity to collect, analyze, and use these... 27e. My agency has staff with the knowledge and skills to integrate 24.2 12.0 36.6 and compare findings from performance measurement, program...

■ Very great extent ■ Great extent ■ Moderate extent ■ Small extent ■ No extent ■ Not applicable or Missing

10%

20%

30%

40%

50%

60%

70%

80%

90%

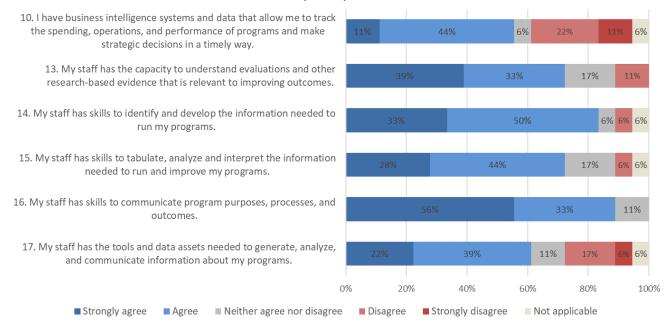
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For the five Staff Skills questions contained in HUD's Senior Manager survey, an average of 76 percent of respondents selected strongly agree/agree (exhibit 8). Staff skills thus appear to be, in the eyes of responding senior managers, the least-weak area of HUD's evidence-building capacity. The strongest negative responses among these questions, 23 percent disagree/strongly disagree, were returned for Q17—which like Q10 addresses the analytic tools and data assets available to staff.

In comparison with the relatively small sample of senior managers, the HUD managers responding to the GAO survey were somewhat more negative concerning the adequacy of agency investments in good data, good systems, and adequate training to support effective performance analysis and management.

Exhibit 8. Senior Manager Responses on Staff Skills and Tools for Evidence Building, 2020 (n = 18)



5. Conclusion

Reading together the results of the qualitative staff assessment, the GAO 2020 Manager Survey, and the HUD Senior Manager Survey, HUD's evidence-building capacity is seen to have significant strengths as well as areas needing improvement. Perceptions of staff skills range across the spectrum. It is likely that some offices have, at best, modest capacity to analyze data and evidence effectively. Large proportions of "[to a] moderate extent" responses to survey questions about staff skills suggest that, in numerous offices, investments in training may generate significant gains in analytic capacity at relatively modest cost. Generalized increases in demand for data analysis across the Department, however, also may require additional hiring of skilled staff.

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Topics for which survey respondents were most likely to return negative responses relate to inadequate data and systems for measuring and managing program performance. The responses to GAO's questions about the types of performance measures available to managers suggest significant gaps in performance information related to resource use and distributional outcomes, and effective use and communication of performance information (Exhibit 2). Senior managers responding to HUD's survey reported the lack of adequate information about outcomes or effects of HUD's programs on communities and on households, evidence for and effects of policy change (including program targeting policy), and the ability to monitor waste and performance of program partners (Exhibits 3 and 6). Such responses are consistent with this *Capacity Assessment*'s review of the strengths and weaknesses of HUD's administrative data.

The evidence lends credence to the substantial emphasis placed in the Evidence Act on the improvement and rationalization of data governance to support evidence-based policymaking.

The survey findings complement the qualitative evidence of this *Capacity Assessment*, which frame a relatively strong program of evaluation, research, statistics and analytics that is centered in the Office of Policy Development and Research. The evaluation program draws strength from throughout the Department as the importance of building and deploying evidence effectively is increasingly well understood, and as program offices are engaged in identifying their learning and research priorities to develop the new Learning Agenda.

6. Appendix A. OMB Circular A-11 (2021) Requirements for a Capacity Assessment²⁰

290.13 What is the Capacity Assessment for Statistics, Evaluation, Research, and Analysis that is required as part of the Evidence Act?

The Evidence Act requires agencies to submit a Capacity Assessment for Statistics, Evaluation, Research, and Analysis (hereinafter referred to as "Capacity Assessment") every four years as part of their Strategic Plans. Led by the Evaluation Officer, in conjunction with the Statistical Official, Chief Data Officer, and other agency personnel, this requires agencies to conduct and provide an assessment of the coverage, quality, methods, effectiveness, and independence of the statistics, evaluation, research, and analysis efforts of the agency. Thus, agencies should assess their statistics, evaluation, research, and analysis activities against the following criteria:

- Coverage: what is happening and where is it happening?
- Quality: are the data used of high quality with respect to utility, objectivity, and integrity?
- Methods: what are the methods being used for these activities, do these methods incorporate the necessary level of rigor, and are those methods appropriate for the activities to which they are being applied?
- Effectiveness: are the activities meeting their intended outcomes, including serving the needs of stakeholders and being disseminated?
- Independence: to what extent are the activities being carried out free from bias and inappropriate influence?

For each of the areas of assessment—statistics, evaluation, research and analysis—OMB encourages agencies to consider the above criteria and think about how those criteria apply for each of these activities within the agency.

In considering the criterion above, agencies must also address the following as part of the Capacity Assessment for Statistics, Evaluation, Research, and Analysis:

- A list of the activities (e.g., programs, initiatives, etc.) and operations (e.g., administrative and support tasks) of the agency that are currently being evaluated and analyzed;
- The extent to which the evaluations, research, and analysis efforts and related activities of the agency support the needs of various divisions within the agency;
- The extent to which the evaluation, research, and analysis efforts and related activities of the agency address an appropriate balance between needs related to organizational learning, ongoing program management, performance management, strategic management, interagency and private sector coordination, internal and external oversight, and accountability;

²⁰ Office of Management and Budget. 2021. "Circular No. A-11: Preparation, Submission, and Execution of the Budget." <u>https://www.whitehouse.gov/wp-content/uploads/2018/06/a11.pdf</u> (single file) or <u>https://www.whitehouse.gov/wp-content/uploads/2018/06/a11 web toc.pdf</u> (individual sections). Strategic planning, performance management, and evidence building topics are contained in Part 6. Additional guidance for the *Capacity Assessment* is found in sections 290.14 and 290.19.

- The extent to which the agency uses methods and combinations of methods that are appropriate to agency divisions and the corresponding research questions being addressed, including an appropriate combination of formative and summative evaluation research and analysis approaches;
- The extent to which evaluation and research capacity is present within the agency to include personnel and agency processes for planning and implementing evaluation activities, disseminating best practices and findings, and incorporating employee views and feedback; and
- The extent to which the agency has the capacity to assist agency staff and program offices to develop the capacity to use evaluation research and analysis approaches and data in the day-to-day operations.

These specific requirements tie directly to the statutory criteria and address elements such as coverage (i.e., the list of activities and operations of the agency that are currently being evaluated or analyzed) and effectiveness (i.e., the extent to which these activities meet the needs of the agency and appropriately balance across those needs). In addition, these requirements touch on important areas like dissemination of findings from statistics, evaluation, research, and analysis activities (i.e., does the agency have processes and procedures in place to make sure findings are disseminated?), as well as the agency's capacity to use these findings (i.e., does the agency learning, improvement, and decision-making?). As agencies assess their capacity in the areas of coverage, quality, methods, effectiveness, and independence, it is important to consider not only whether and how the agency is doing those activities, but also whether they have staffing, infrastructure, and processes to do so. In that sense, this Capacity Assessment should be holistic, considering the agency's current capacity, but also what future capacity might be needed.

The Capacity Assessment is expected to provide agencies with a baseline against which they can measure improvements to coverage, quality, methods, effectiveness, and independence of their statistics, evaluation, research, and analysis activities. The Capacity Assessment will provide senior officials with information needed to improve the agency's ability to support the development and use of evaluation, coordinate and increase technical expertise available for evaluation and related research activities within the agency, and improve the quality of evaluations and knowledge of evaluation methodology and standards.

In conducting the assessment, agencies should draw on existing OMB guidance and policies, including, but not limited to:

- OMB Memorandum M-21-27, Evidence-Based Policymaking: Learning Agendas and Annual Evaluation Plans;
- OMB Memorandum M-19-23, Phase I Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Learning Agendas, Personnel, and Planning Guidance;
- OMB Memorandum M-20-12, Phase 4 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Program Evaluation Standards and Practices;
- OMB Memorandum M-19-15, Improving Implementation of the Information Quality Act;
- OMB Memorandum M-18-04, *Monitoring and Evaluation Guidelines for Federal Departments* and Agencies that Administer United States Foreign Assistance;
- Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies; and

• OMB Statistical Policy Directives.

In developing the Capacity Assessment, OMB encourages agencies to use a format, process, and structure that best meets their specific context. There is no template or specific format for this document, but OMB expects that each agency's assessment will include discussion and analysis of the five criteria (i.e., coverage, quality, methods, effectiveness, and independence) for their statistics, evaluation, research, and analysis activities, including those specific components listed above. The Capacity Assessment must be a standalone component of the agency strategic plan. Agencies may include it as a separate section, chapter, appendix of, or document referenced in and posted along with, the strategic plan. If an agency chooses to include the Capacity Assessment as an appendix or separate referenced document, they must summarize the Capacity Assessment somewhere in the body of the strategic plan.

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





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