

# DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

## Office of the Chief Information Officer

### Information Technology Fund

#### SUMMARY OF RESOURCES

(Dollars in Thousands)

	Enacted/ Requested	Carryover <sup>a</sup>	Supplemental/ Rescission	Total Resources	Obligations	Outlays
2019 Appropriation	280,000	152,421		432,421	341,842	240,000
2020 Appropriation	280,000	90,579		370,579	280,000	379,000
2021 President's Budget	257,600	92,579		350,179	257,600	267,000
Change from 2020	(22,400)	2,000		(20,400)	(22,400)	(112,000)

<sup>a/</sup> Includes transfers from Technology Modernization Fund and recaptures from prior years.

#### PROGRAM PURPOSE

The Information Technology (IT) Fund provides for the infrastructure, systems, and services that support all Department of Housing and Urban Development (HUD) programs, which include all of HUD's mortgage insurance liabilities, rental subsidies, and formula and competitive grants. It also provides services for all administrative and mission support programs.

#### BUDGET OVERVIEW

The 2021 President's Budget requests of \$257.6 million. Along with funds that will be carried over from 2020, this supports Operations and Maintenance (O&M) activities (sustaining current systems and applications) and limited Development, Modernization, and Enhancement (DME) initiatives.

The requested budget provides for the operation of current IT systems and applications that support HUD's business, administrative functions, and the IT infrastructure (such as computer hardware, network and communications, support services, enterprise software licenses, and cybersecurity). This amount incorporates a \$52.3 million reduction from the 2020 IT Fund baseline, which will be requested in HUD's Working Capital Fund request in 2021. The reduction includes end-user IT equipment, including computers and laptops, mobile phones, peripherals, required network and support infrastructure, and Microsoft Office 365 licenses. The IT Fund budget also provides for critical new investments in technology to support the President's Management Agenda (PMA) and HUD strategic plan. These new investments improve delivery of services to citizens and promote the effective stewardship of taxpayer dollars. Smart IT investment is critical to realizing efficiencies and improving customer access to HUD services. The Office of the Chief Information Officer (OCIO) is pursuing development and modernization initiatives that leverage enterprise technology to promote decent, safe, and affordable housing for Americans, provide access to homeownership opportunities, create healthier home environments, and reduce homelessness.

Planned investments will lead to improved program performance and lower technology costs by achieving economies of scale through integration and consolidation of IT systems, and greater use of enterprise capabilities. In accordance with Federal Information Technology Acquisition Reform Act (FITARA) and Executive Order 13833, the CIO has expanded oversight and management of IT spending, including direct control over agency staff with primarily IT functions. The CIO is working with program offices to define their technology needs, digitize manual processes, and improve end-user experiences. The request will also greatly expand and strengthen cybersecurity at HUD by continuing implementation of a comprehensive cybersecurity program that is consistent with Executive Order 13800 and addresses critical security deficiencies related to cyber risk management, the operating environment, governance, data protection and identity/access management.

## JUSTIFICATION

At the \$257.6 million requested level, HUD will strengthen cybersecurity and maintain the scope and pace of its modernization. OCIO is also leveraging the cloud and emerging technology across its programs to replace standalone capabilities within each mission area. The agency is continuing the transition to an enterprise approach for common functionality (such as case and workflow management, records and data management, and reporting/business intelligence). Applications and infrastructure are being moved to the cloud and capacity expanded in architecture design and implementation, in-house solution engineering, and continuous integration and delivery of new products into operations. These will expand the capacity to deliver timely and cost-effective new projects.

The 2021 Budget request builds upon the critical modernization of IT systems that began in 2019. In 2019, HUD collaborated with the GSA Centers of Excellence to complete current state assessments and recommendations, and developed requirements to begin implementing these recommendations in 2020. These efforts will accelerate modernization using new technologies such as intelligent automation and artificial intelligence to maximize impact to the public and return on investment to taxpayers. Initiatives planned to begin in 2021 include building electronic records management, intelligent data extraction, electronic forms, and advanced data analytics and visualization capabilities.

OCIO focus on key investment initiatives to result in new capabilities and technologies will strengthen and modernize mission programs and enterprise support functions. The result will be a mix of direct mission and support proposals to consolidate systems, provide enterprise capabilities, and reduce customer burden through improved program operating efficiencies. By using an agile approach, HUD will deliver new functionality incrementally, while maximizing flexibility and minimizing risk. OCIO will identify common areas of functionality required by the HUD enterprise and provide IT solutions aligned to each specific function (or closely grouped functional bundles) that any program office or line of business can use.

HUD is establishing a comprehensive cybersecurity program that addresses all five functions of the Cybersecurity Framework (CSF) to strengthen its cybersecurity capability to further reduce enterprise exposure to vulnerabilities and reduce the overall risks to the Department. In 2021, the improvements include proactive audit remediation, the Security Operations Center/Computer Incident Response Team (SOC/CIRT) maturation, and the governance, risk management, and compliance programs enhancement. OCIO will deploy innovative security technology and processes to increase the speed of detection, analysis, decision making and action. A cybersecurity architecture team will be established to enable systems development and enhancement in the most secure manner that meets mission objectives. OCIO will continue to enhance continuous monitoring program, general workforce security awareness and training program and cybersecurity professional development program.

OCIO continues to review its current contracts to consolidate and reduce scope, duplications, and excessive service levels to realize savings that may be re-invested in modernization and security upgrades. It also continues to streamline the operating environment by executing a prioritized set of enhancements to the IT infrastructure, which will modernize and consolidate the existing outdated legacy platforms. This will reduce the security vulnerabilities of IT applications and will reduce long-term IT costs. In 2021, HUD will have completed its transition to a more agile, modern, mobile-friendly environment. This includes enterprise software agreements and FedRamp cloud solutions, implementing GSA strategic sourcing contracts, migrating all computer hardware into two multi-tenant shared data centers, and moving enterprise applications to the Cloud.

The result of all these improvements will be increased efficiency, enhanced internal monitoring and management capabilities, and optimized IT Infrastructure services. Costs will be lower through economies of scale and streamlined technology, driven by integration and consolidation of IT systems and greater use of enterprise shared services. HUD is committed to using technology to the fullest, to better serve citizens, retire obsolete and inefficient IT systems, and reduce the cost and complexity of its applications.

### **FHA Single-Family Housing Modernization**

The budget request includes \$20 million for the third year of the multi-year initiative to modernize FHA's antiquated systems, which have not kept up with technology improvements in the industry. FHA is the world's largest mortgage insurer with a single-family mortgage portfolio in excess of \$1 trillion to low-income, first-time, and other targeted homeowners. It has used a siloed approach to perform the functions of insurance endorsement, claims payments, and risk management. HUD's infrastructure and platforms will be modernized to transform FHA's Single-Family loan processes to reduce cost, reduce risk and fraud, and bring FHA in line with current industry practices. HUD is developing solutions to provide full lifecycle and servicing support for single-family loans. The Office of Housing will also transform the business processes to align with the new systems and platforms.

The FHA investment builds upon HUD's 2018 award from the Technology Modernization Funds (TMF) that is moving key Housing systems from its Unisys mainframe systems to the cloud. These systems control the disbursement of billions of dollars and modernizing the database technology platform will tighten security with the latest encryption mechanism, authentication, and authorization techniques. It will also substantially reduce costs. HUD expects to complete this project in 2021 and with the experience gained, OCIO will also modernize the back end by moving other existing systems off mainframes to the cloud.

HUD is also developing a roadmap to leverage technology components, platforms, and the execution from the Single-Family modernization for use in in the Multi-Family program. With future funding, this will result in an integrated end-to-end system for multifamily production and asset management to dramatically improve timeliness, reliability, and quality of services for property owners and lenders.

### **Other Investments**

HUD is using available funding to make progress on other important and noteworthy modernization initiatives that will begin or continue in 2021, including:

Enterprise Subsidies Management Program (eSM): This program modernizes HUD's subsidies programs to include business process, financial management, and technology to better serve families in need of decent and affordable housing. This will transform and ultimately optimize how HUD manages \$35 billion in housing subsidies. In the current environment, programmatic functions are performed using manual processes, and outdated systems. Financial management and disbursements also use legacy systems that will be ultimately replaced. OCIO initiated the electronic Voucher Management System (eVMS) to automate the accurate calculation of \$22 billion in HUD payments to Public Housing Agencies (PHAs) and will eventually perform subsidy calculations for other programs.

National Standards for the Physical Inspection of Real Estate (NSPIRE): HUD's current inspection processes put residents in jeopardy of being exposed to unacceptable health and safety risks. There are currently several disparate, siloed, program-unique systems that perform the functions required to order, perform, and evaluate physical condition inspections. The Secretary directed the Department to improve the current inspection standards, protocols, processes, and systems used to assess the physical condition of the HUD assisted and insured housing. OCIO is actively supporting

this effort and is providing IT support and solutions that will improve HUD’s ability to identify and correct substandard housing conditions.

Grants Management: HUD will conduct planning and develop a roadmap to improve the grants making process by streamlining, modernizing, and consolidating the systems for HUD’s eight separate grant programs. This includes the systems used for the management, evaluation, and financial aspects of eight separate grants programs. This work will address problems with manual and duplicative processes and grants documents across the agency; lack of accountability; high operating costs; and lack of connectivity to its core financial systems.

**SUMMARY OF RESOURCES BY PROGRAM**

(Dollars in Thousands)

Budget Activity	2019 Budget Authority	2018 Carryover Into 2019	2019 Total Resources	2019 Obligations	2020 Appropriation	2019 Carryover Into 2020	2020 Total Resources	2021 President's Budget
Operations, Maintenance, Development, Modernization and Enhancements	280,000	152,421	432,421	341,842	280,000	90,579	370,579	257,600
<b>Total</b>	<b>280,000</b>	<b>152,421</b>	<b>432,421</b>	<b>341,842</b>	<b>280,000</b>	<b>90,579</b>	<b>370,579</b>	<b>257,600</b>

**IT Resource Statement**

In accordance with OMB Circular A-11, Section 51.3, the Department of Housing and Urban Development (HUD) provides the following statements:

- a) The Chief Information Officer (CIO) has collaborated as necessary, with the Senior Agency Official for Privacy (SOAP) and the Chief Financial Officer (CFO) on the IT Budget submissions, and that IT includes appropriate estimates of all IT resources included in the budget request.
- b) The CIO has reviewed and had significant input in approving all IT Investments included in this budget request.
- c) The CFO and the CIO state that the CIO had a significant role in reviewing planned IT support for major programs and for significant increases and decreases in IT resources reflected in this budget.
- d) HUD has developed and implemented a plan to ensure that all common baseline FITARA responsibilities are in place to show that the desired development outcome is Fully Implemented (Level 3) for the FITARA common baseline rating Element D (“D1. CIO reviews and approves major IT Investment portion of budget request”).
- e) The CIO certifies the use of incremental development practices for current and proposed new IT investments in all programs throughout HUD.
- f) The IT budget submission addresses privacy requirements for automated systems as well as any associated costs, which are explicitly identified and included with respect to any IT resources that will be used to create, collect, use, process, store, maintain, disseminate, disclose or dispose of personally identifiable information (PII). The CIO has not addressed HUD Privacy Program costs that are not associated with IT systems.

## LEGISLATIVE PROPOSALS AND GENERAL PROVISIONS

The 2021 Budget includes a General Provision related to the IT Fund (Sec. 227). This provision is described further in “Fiscal Year 2021 General Provisions”.

### APPROPRIATIONS LANGUAGE

The 2021 President's Budget includes proposed changes in the appropriation language listed below. New language is italicized, and language proposed for deletion is bracketed.

For the development, modernization, and enhancement of, modifications to, and infrastructure for Department-wide and program-specific information technology systems, for the continuing operation and maintenance of both Department-wide and program-specific information systems, and for program-related maintenance activities, [~~\$280,000,000~~]*\$257,600,000*, of which [~~\$260,000,000~~]*\$237,600,000* shall remain available until September 30, [2021]*2022*, and of which \$20,000,000 shall remain available until September 30, [2022]*2023*: Provided, That any amounts transferred to this Fund under this Act shall remain available until expended: Provided further, That any amounts transferred to this Fund from amounts appropriated by previously enacted appropriations Acts may be used for the purposes specified under this Fund, in addition to any other information technology purposes for which such amounts were appropriated[: Provided further, That not more than 10 percent of the funds made available under this heading for development, modernization and enhancement may be obligated until the Secretary submits to the House and Senate Committees on Appropriations, for approval, a plan for expenditure that-(A) identifies for each modernization project: (i) the functional and performance capabilities to be delivered and the mission benefits to be realized, (ii) the estimated life-cycle cost, and (iii) key milestones to be met; and (B) demonstrates that each modernization project is: (i) compliant with the Department's enterprise architecture, (ii) being managed in accordance with applicable life-cycle management policies and guidance, (iii) subject to the Department's capital planning and investment control requirements, and (iv) supported by an adequately staffed project office]. (*Department of Housing and Urban Development Appropriations Act, 2020.*)