INFORMATION TECHNOLOGY FUND 2018 Summary Statement and Initiatives (Dollars in Thousands)

INFORMATION TECHNOLOGY FUND	Enacted/ <u>Request</u>	<u>Carryover</u>	Supplemental/ Rescission	Total <u>Resources</u>	<u>Obligations</u>	<u>Outlays</u>
2016 Appropriation	\$250,000	\$100,491a		\$350,491	\$262,792	\$229,394
2017 Annualized CR	249,525	88,841		338,366	295,307	248,870
2018 Request	250,000	<u>45,059</u>	<u></u>	<u>295,059</u>	295,000	280,146
Change from 2017	+475	-43,782		-43,307	-307	+31,276

a/ Carryover includes \$49 million brought forward from fiscal years 2015 and 2016 to be obligated on the "HEAT" Systems Integration contract in fiscal year 2018.

1. Program Purpose and Fiscal Year 2018 Budget Overview

The Information Technology (IT) Fund provides funding 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, formula and competitive grants. The fiscal year 2018 request is \$250,000,000. The request, along with funds that will be carried over from fiscal year 2017, will support Operations and Maintenance (O&M) activities (sustaining current systems and applications), and continuation of Development, Modernization, and Enhancement (DME) initiatives. These DME projects will further efforts to transform HUD's IT infrastructure by consolidating systems, providing enterprise capabilities, and improving the effectiveness and efficiency of programs and operations.

2. Request

As HUD pursues strategic realignment to maximize the impact of operational resources to deliver on its mission, smart IT investment is a critical component to finding and realizing necessary efficiencies. HUD is committed to using technology to better serve our citizens, giving them the tools and information they need to more readily access HUD services. Requested funds provide for the operations and maintenance of the current IT infrastructure (such as servers, desktops and other equipment, networks and communications, support services, enterprise software licenses, and security) as well as IT systems and applications that support HUD's core business and administrative functions. In accordance with FITARA, the Chief Information Officer (CIO) is improving the way HUD manages its IT spending by: working with offices to define program needs, re-platforming legacy systems, and scrubbing IT contracts and systems. As HUD identifies savings, it is reinvesting those savings in modernization,

Information Technology Fund

security upgrades, and leveraging the cloud and emerging technology across its programs to replace standalone capabilities within each mission area. This will gradually lower technology costs by achieving economies of scale and streamlined technology, driven by integration and consolidation of IT systems and greater use of enterprise shared services.

Of the \$250 million request, \$10 million will support development and modernization initiatives that leverage enterprise technology to support HUD's mission. The integration and consolidation of IT systems will enable the delivery of new capabilities faster by migrating financial and programmatic management functions to common platforms using modern cloud-based technologies. HUD will capitalize on opportunities to digitize manual processes and end user experiences with improved functionality. These enterprise solutions will address complexities across the agency by requiring data consolidation, simplified interfaces, and standardized business functionality.

3. Justification

For several years, the IT Fund has supported the continuity of operations and maintenance of existing technologies with limited resources allocated for significant development initiatives. During this time, the CIO has led reviews of O&M contract requirements that reduced contract scope and service levels, and consolidated or eliminated contracts. The Department continues to assess and streamline O&M needs to prioritize investments needed to update HUD's IT infrastructure by modernizing, and consolidating the existing operating platforms of HUD's outdated, legacy systems. This will reduce the security vulnerabilities of HUD's IT systems and will reduce long term IT costs by increasing the systems' sustainability and operability.

Operations and Maintenance (O&M) Activities

HUD plans to spend \$240 million for its recurring O&M activities. Approximately two-thirds of the funds are used for the IT infrastructure and operations that support the entire Department. The remainder is needed for individual systems and applications that are directly used by core mission programs and by enterprise administrative areas. HUD plans to spend \$10 million on cybersecurity and modernization investments that will support public housing authorities and managing risk in FHA's mortgage liability portfolio. HUD will continue to use a "cloud first" approach to migrate from its outdated and unsupported systems and applications and provide more technical and security support thereby reducing cybersecurity vulnerabilities. HUD is using the cloud technology to make its applications more mobile and agile to increase performance. HUD's e-mail, Customer Relationship Management systems, and internet sites have been migrated to HUD's cloud, and new applications are slated for cloud design.

Cybersecurity efforts include continuing the development of an overall cybersecurity framework and implementation of the Department of Homeland Security's Continuous Diagnostics and Mitigation (CDM) Program. This program is intended to create a common baseline of cybersecurity capability and protection across the Federal Government. The program will provide HUD with CDM-certified capabilities and tools that identify and prioritize cybersecurity risks on an ongoing basis and enable cybersecurity personnel to mitigate the most significant problems first. The CDM tools provide near real-time awareness of HUD's networks and environments.

Information Technology Fund

HUD has also initiated major infrastructure improvement initiatives to develop enterprise wide solutions that address legacy and aging IT systems and technology. HUD has been transitioning its IT infrastructure since fiscal year 2014, to a more agile, modern, mobile-friendly environment that utilizes a federal shared service provider. This transformation effort is known as the HUD Enterprise and Architecture Transformation (HEAT) initiative and is scheduled to be completed in fiscal year 2018. HEAT has successfully completed HUD's transition to enterprise software agreements and FedRamp cloud solutions, implementation of GSA strategic sourcing contracts that include Networx and FSSI for Mobile Services, migration of HUD Data Centers into two multitenant shared data centers, and migration of enterprise applications to the cloud. These efforts have resulted in a cost-effective IT environment that is delivering enhanced security, augmented internal monitoring and management capabilities, and optimized IT Infrastructure services.

In fiscal year 2018, the transformation of HUD's IT infrastructure will continue without a significant increase in requested O&M appropriated funding. OCIO is conducting the final phases of the HEAT initiative which include using \$49 million of carryover funding to transition from the current end user support contract to a new enterprise System Integration and End User contract. Another HEAT project is to conduct a thorough analysis of all HUD's IT systems and applications, including a cloud compatibility assessment. Its goal is to provide valuable and actionable insights to reduce operating costs, optimize existing IT assets, modernize applications, and provide better IT service capabilities.

Development, Modernization and Enhancement (DME)

HUD has a strategic priority to retire obsolete and inefficient IT systems and is actively pursuing modernization initiatives to reduce the cost and complexity of its systems portfolio, based on the following development principles: internal shared services, standard data architecture and management, and a standard Business Services Hub. HUD's enterprise-level vision approaches the development of solutions from a business perspective, ensuring improved and streamlined business models that drive HUD's mission. Whether it is case management, workflow, business intelligence, or data management, the goal is to "build systems once and use them many times."

In fiscal year 2017, HUD continues to invest in new development, and build upon investments started with DME funding received in fiscal year 2014. For fiscal year 2018, HUD plans to spend approximately \$15 million of its carryover funds on DME initiatives using agile development to consolidate systems, provide enterprise capabilities, and reduce customer burden. The funding will go toward technology solutions that will be paired with business process improvements and enterprise design and architecture that will help maximize the efficiency and effectiveness of the development projects.

HUD has employed agile IT development techniques so that new capabilities and digital services are delivered quickly to the programs. We continue to build and deliver smaller discrete capabilities, based on the design and requirements. To maximize funds, we will identify the business requirements and processes to be addressed. We will then match these to the best technologies, and plan a detailed course of action prior to additional development work on potentially major initiatives.

Information Technology Fund

The major fiscal year 2018 DME initiatives included in this budget are:

- The enterprise Subsidy Management Program (eSM) requires \$8 million to improve the cash management of more than \$20 billion in housing choice vouchers and \$4 billion in program operating funds by modernizing the capabilities in the Voucher Management System (VMS) into an Enterprise Voucher Management System (eVMS) to improve business processes in the Public Housing Authorities (PHAs). This will significantly reduce excess reserves held by the PHAs, address cash management audit findings, and ensures compliance with Treasury cash disbursement policies.
- The Federal Housing Administration (FHA) requires \$5 million to ensure compliance with security requirements across its
 systems, and begin to deliver a modernized, secure, and scalable solution to meet industry standards for
 Counterparty Management, Portfolio Analysis, Borrower/Collateral Risk Management/Fraud Monitoring, and
 Infrastructure/Application Modernization. The current systems constrain FHA's ability to adapt its operations to changes in the
 housing industry, meet industry standard analysis and reporting for property costs and recovery rates, and increases risk to
 the Mutual Mortgage Insurance (MMI) Fund.
- A Unified Customer Relationship Management system (CRM) requires \$2 million for HUD to continue to upgrade and replace multiple legacy CRM solutions. This will improve customer service and satisfaction, ensuring that customers quickly connect to the appropriate HUD resource that can help them.

INFORMATION TECHNOLOGY FUND Summary of Resources by Program (Dollars in Thousands)

Budget Activity	2016 Budget Authority	2015 Carryover <u>Into 2016</u>	2016 Total Resources	2016 <u>Obligations</u>	2017 Annualized CR	2016 Carryover Into 2017	2017 Total <u>Resources</u>	2018 <u>Request</u>
Operations and Maintenance Development, Modernization, and	\$250,000	\$66,587	\$316,587	\$228,888	\$249,525	\$71,841	\$321,366	\$250,000
Enhancement	250,000	$\frac{33,904}{100,491}$	<u>33,904</u> 350,491	33,904 262,792	249,525	17,000 88,841	<u>17,000</u> 338,366	250,000

NOTE: The carryover includes \$1.9 million of actual recaptures in fiscal year 2016, and \$2 million anticipated in fiscal years 2017 and 2018.

INFORMATION TECHNOLOGY FUND Appropriations Language

The fiscal year 2018 President's Budget includes proposed changes in the appropriation language listed below.

INFORMATION TECHNOLOGY FUND

For the development 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, \$250,000,000, shall remain available until September 30, 2019: 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.

Note.—A full-year 2017 Annualized CR for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Continuing Appropriations Act, 2017 (P.L. 114–254). The amounts included for 2017 reflect the annualized level provided by the continuing resolution.