

**INFORMATION TECHNOLOGY FUND
2017 Summary Statement and Initiatives
(Dollars in Thousands)**

INFORMATION TECHNOLOGY FUND	<u>Enacted/ Request</u>	<u>Carryover</u>	<u>Supplemental/ Rescission</u>	<u>Total Resources</u>	<u>Obligations</u>	<u>Outlays</u>
2015 Appropriation	\$250,000	\$150,901 ^a	...	\$400,901	\$301,594	\$276,059
2016 Appropriation	250,000	103,307 ^b	...	353,307	343,000	282,000
2017 Request	<u>286,000</u>	<u>14,307^c</u>	<u>...</u>	<u>300,307</u>	<u>295,307</u>	<u>292,000</u>
Program Improvements/Offsets	+36,000	-89,000	...	-53,000	-47,693	+10,000

a/ Includes \$2.84 million of actual recaptures and \$2.5 million of transfers from salaries and expenses during fiscal year 2015. It also includes \$49.4 million of funding for the HUD Information Technology Service (HITS) contract. The obligation of these funds was delayed from August 2014 due to ongoing contract negotiations that resulted in a savings of \$7 million.

b/ Includes \$4 million in anticipated O&M recaptures during fiscal year 2016. It will provide \$49.2 million of funding for a contract supporting the HEAT initiative, an obligation which was delayed from fiscal year 2015.

c/ Includes \$4 million in anticipated O&M recaptures in fiscal year 2017, and \$10.3 million of O&M not obligated in fiscal year 2016.

1. What is this request?

In fiscal year 2017, HUD requests \$286 million for the Information Technology (IT) Fund, an increase of \$36 million over the fiscal year 2016 appropriation. The request supports Operations and Maintenance (O&M) activities (sustaining and modernizing current systems), and new 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. The request includes \$239 million of 2-year funding and \$47 million of 3-year funding.

**Fiscal Year 2017 Request in Detail
(Obligations Dollars in Millions)**

IT Fund	FY 2015 Actual	FY 2016 Enacted	FY 2017 Request
Operations & Maintenance	\$279	\$250	\$250
Development, Modernization, and Enhancement	23	...	36
Total	302	250	286

2. What is this program?

The IT Fund provides for the IT infrastructure and systems that support the entire Department, including all of HUD's mortgage insurance liabilities, rental subsidies, and formula and competitive grants. HUD will use the O&M funding, which is the same amount as the two prior years, to sustain current systems and to modernize and consolidate systems to create efficiencies and reduce security vulnerabilities. Consistent with FITARA, OCIO is continuing to change the way HUD manages its spending and development—working with offices to define program needs and using that to drive development of requirements, re-platforming of legacy systems, and scrubbing contracts and systems to find efficiencies. As HUD is able to identify savings through these efficiencies, the Department will re-invest the savings to support modernization and security upgrades, including supporting DATA Act requirements and enterprise purposes outlined below.

The DME funding will allow critical development initiatives that leverage enterprise technology to support HUD's mission areas, and reduce the number of stand-alone, stove-piped capabilities. HUD will modernize business systems into enterprise solutions, while addressing audit findings and emerging (regulatory) requirements. The integration and consolidation of IT systems will enable the delivery of new capabilities faster at lower cost 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. Developing these enterprise solutions must address complexities across the agency, and requires data consolidation, simplified interfaces, and standardized business functionality.

3. Why is this program necessary and what will we get for the funds?

Operations & Maintenance (O&M)

These funds provide for the operations and maintenance of the current IT systems and applications, supporting HUD's business and administrative functions and its IT infrastructure (servers, communications, equipment and support, desktops, mobile devices, enterprise licenses/intellectual property and ancillary engineering, management and security). HUD will expand its focus on platform modernization improvements and developing a cybersecurity framework.

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**O&M Funding by Business Segment
(\$ in Thousands)**

Note: See Appendix for descriptions of each business segment.

Segment	FY2015 Actual	FY 2016 Enacted	FY 2017 Estimate
Acquisition Management	\$1,618	\$809	...
Administrative Management	949	1,045	\$1,045
Business Analytical Services	3,443	3,066	3,066
Controls & Oversight	7,948	8,197	8,197
Customer Relationship Management	2,782	2,117	2,117
Data Management Services	1,025	1,032	1,032
Digital Asset Services	3,404	3,410	3,410
Financial Management	6,385	10,251	10,251
Grants Management	6,929	6,918	6,918
Human Resource Management	1,013	1,001	1,001
Information Technology *	202,655	168,712	169,438
Mortgage Insurance	25,626	27,055	27,055
Planning and Budgeting	550	541	541
Public Affairs	1,682	3,688	3,688
Regulatory, Legislative, and Enforcement	4,310	6,284	6,284
Subsidies Management	7,540	5,181	5,181
eGov Initiatives	879	693	\$776
TOTAL	278,738	250,000	\$250,000

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* Fiscal year 2015 includes \$49.4 million from carryover funding for the HUD Information Technology Service (HITS) contract due to contract negotiations that resulted in a savings of \$7 million. Fiscal years 2016 and 2017 include \$10-15 million for cybersecurity and platform modernization investments to be ultimately spread among multiple business segments. For example, these are anticipated to include migration of various public housing assessment (financial, management, physical, and quality) systems to platforms that would allow their migration to the cloud. This will reduce the infrastructure cost, with more storage and computing capacity. Funds may also be used for additional tools to improve the overall security of HUD infrastructure and applications, such as Security Information and Event Management (SIEM), a threat intelligence analysis tool to predict and prevent cyber attacks, and encryption tools for HUD data.

In fiscal year 2015, the OCIO led a review of O&M contract requirements that resulted in savings achieved mostly by reducing contract scope and service levels. The savings have been reinvested in fiscal year 2016, along with previous year carryover to support the transition of HUD's IT infrastructure environment, known as the HUD Enterprise and Architecture Transformation (HEAT) initiative, to a more agile, modern, mobile-friendly environment.¹

In fiscal year 2016, the Department will assess O&M needs by consolidating or eliminating contracts and invest the savings from this streamlining to update HUD's IT infrastructure by modernizing, and where possible, 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. The savings from the O&M streamlining will allow HUD to begin the migration from the most outdated and unsupported systems and applications and provide these applications with more technical and security support, eliminating cybersecurity vulnerabilities, and making them operate more efficiently and more effectively. Additional cybersecurity improvements will include developing an overall cybersecurity framework, a NIST compliant incident response program, and Continuous Diagnostics Monitoring. HUD is using cloud technology to make its applications more mobile and agile, and to increase performance. HUD's e-mail system and Customer Relationship Management systems are in HUD's cloud. Additional applications such as HUD.gov and HUD@work have also been migrated to HUD's cloud, and new applications are slated for cloud design from start to finish.

¹ HUD is not requesting any funds in fiscal year 2017 for HEAT, which will transition HUD's IT infrastructure, including the data center and the end user equipment (desktops, laptops and other devices) from the current contracts to a federal shared service provider. This will improve HUD's security, augment internal monitoring and management capabilities, and reduce the cost of maintaining core IT infrastructure. In fiscal year 2015, HUD made significant progress planning the transition from costly, managed service contracts to smaller performance based contracts. Several functions, including mobile services have already been moved to GSA contracts. HUD anticipates completing a migration to a new end user contract in fiscal year 2016, and further leveraging other functions to federal shared services in fiscal year 2017. We anticipate requiring some final transitional funds in the fiscal year 2018 budget.

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Development, Modernization, and Enhancement (DME)

HUD is requesting \$36 million in DME funding towards consolidating systems, providing enterprise capabilities, and reducing customer burden through improved program operating efficiencies. Our approach is to develop functionality that will support the entire enterprise, while still addressing specific programmatic and policy needs. We will build and deliver smaller discrete capabilities, based on the design and requirements development work. To maximize these funds, we will carefully identify the business requirements and processes to be addressed or possibly re-defined. We will then match these to the best technologies, and plan a very detailed course of action before doing additional development work on potentially major initiatives.

**DME Funding by Project
(\$ in Thousands)**

Project	Segment	Funding
FHA Automation & Modernization	Mortgage Insurance	\$13,000
Voucher Management System (VMS) and HUD Centralized Accounting and Program System (HUDCAPS) Decommissioning	Subsidies Management	8,000
Enterprise Data Warehouse (EDW)	Data Management Services	4,000
Customer Relationship Management Capability(CRM)	Customer Relationship Management Services	4,000
Grants Management System Consolidation	Grants Management	2,500
Affirmatively Furthering Fair Housing (AFFH) Initiative	Business Analytical Services	1,500
Next Generation Management System (NGMS)	Subsidies Management	1,500
HUD Enterprise-Wide Records Management System (HERMS)	Digital Asset Services	1,000
FHEO Section 3 Performance and Evaluation and Registration	Controls and Oversight	500
TOTAL		\$36,000

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Whether it is case management, workflow, business intelligence or data management, the goal is to “build systems once and use them many times.” This will provide the best support to HUD’s grants management, mortgage insurance, housing vouchers and enforcement programs. HUD will employ agile IT development techniques so that new capabilities and digital services can be delivered quickly, at a lower cost and risk to the programs.

The requested funding will continue progress on major investments such as NGMS and HUDCAPS Decommissioning, and will build on our foundational investment in HUD’s Enterprise Data Warehouse and Customer Relationship Management tool. It will also allow HUD to make significant progress in designing and implementing the consolidation of numerous grants management-related systems. The requested 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.

Descriptions of the requested investments follow:

FHA Automation of Business (*Lender, Loan, Risk and Asset Management*) Processes and Systems Modernization: \$13 million

Description: The IT systems currently supporting critical FHA business processes consist of complex, aging IT systems with COBOL-based mainframe applications as the foundation. These legacy systems were assembled as business needs surfaced over the last 30 years, without the benefit of an architectural plan that could provide the adaptability needed to meet regulatory and industry standards over time.

Today, FHA operations require data to move between numerous touch points through hundreds of interfaces, resulting in an environment that has become increasingly complex, costly, and difficult to maintain. The complex nature of the current IT environment constrains FHA’s ability to adapt its operations to changes in the housing industry, economic trends, and new legislation.

The Federal Housing Administration (FHA) intends to deliver a modernized, secure, and scalable digital solution that addresses critical operational and functional needs. Therefore, this funding request supports the continued planning, design, and execution for requirements focused on Counterparty Management, Portfolio Analysis, Borrower/Collateral Risk Management/Fraud Monitoring and Infrastructure/Application Modernization. This investment will modernize obsolete applications and reduce infrastructure costs, reduce fragmentation of legacy systems, and leverage shared components and data in support of multiple housing programs. This may also include planning for the consolidation of asset management systems related to the disposition of Single Family properties, insurance claims processing, and monitoring of loan defaults. This effort will increase efficiency and address the following operational and performance requirements:

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- Reduce the footprint of business critical applications operating on HUD's mainframe platforms
- Enable compliance with federal procurement policy by ending a history of sole source contracting to the same vendor over the past 20-to-30 years
- Reduce the high cost of sole source monopoly operations by eliminating HUD's dependency on proprietary non-commercial software
- Enable industry standard analysis and reporting for property costs and recovery rates
- Improve property management outcomes in neighborhoods by increasing the availability of FHA systems to property managers in line with commercial practice
- Reduce risk to the Mutual Mortgage Insurance (MMI) Fund by adjusting its claims process to: (1) conduct automated validations of expenses prior to claims being paid and (2) conduct pre-claim/pre-conveyance property inspections to identify assets not meeting the Department's property condition requirements.

Business Need/Value: In fiscal year 2010, FHA began planning for the execution of strategic initiative recommendations originating from the IT Strategy and Improvement Plan completed in August 2009. These initiatives sought to streamline current FHA business processes and modernize the technical infrastructure and applications for Loan Origination and Underwriting, Business Partner Approval, and Business Partner Monitoring processes.

To date, FHA has deployed multiple transformed business capabilities consistent with the objective of automating and consolidating processes to drive improvements in the acquisition of lender, borrower, and asset data for improved reporting, transparency, and informed decision-making throughout the end-to-end life cycle of the loan. For example, many new automated capabilities associated with the Lender Electronic Assessment Portal (LEAP) have been completed, such as Lender approval and recertification, and electronic appraisal.

FHA must keep pace with industry standards as lenders, servicers, investors, and others are improving their access to data. By continuing to invest in automated and modernized business processes, FHA will be better informed of risk and improve its policies for endorsement, servicing, quality control, counterparty management, and enforcement. Critical data needs include appraisal, loan application, borrower, loan documents and data, and counterparty data such as appraiser, lender, servicer, and non-profit entity information.

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eVMS/HUDCAPS De-commissioning: \$8.0 million

Description: HUD's business transformation and IT modernization is driving the approach for the de-commissioning of HUDCAPS and other legacy systems. By carefully putting the right infrastructure in place, this will be accomplished most efficiently, and with limited impact on programs. The eVMS/HUDCAPS Decommissioning project has been established to achieve these goals.

This initiative began in fiscal year 2016 with planning to determine an Integrated Master Project Schedule with applicable resources. The main design/development is expected to take 18 months, with capabilities to be delivered every six months. Upon completion of this effort in fiscal year 2017, HUDCAPS and Program Accounting System (PAS) de-commissioning activities will begin.

The fiscal year 2017 request will deliver the following capabilities into production:

- An Enterprise Business Hub – designed and developed in fiscal year 2016, the Hub will provide an enterprise framework of components to perform common services, manage data access/updates, and guarantee data quality within a secured environment. The Hub will be the single conduit of data between HUD mission systems, legacy systems, and external components, and will eliminate redundant technologies and streamline IT costs by housing critical services in one location allowing their use by multiple systems. The Business Hub will use the new Enterprise Data Warehouse to access and store data.
- eVMS – the automated, monthly process for PIH Section 8 Cash Management is being designed and developed in fiscal year 2016, and will be parallel tested and implemented in fiscal year 2017. The automated module will provide improved support for PHA cash disbursements amounts based on payee-level data, and greater transparency to external stakeholders, including the Office of the Inspector General.
- In addition, HUDCAPS, PAS and Financial Data Mart (FDM) will be replaced with systems that interface directly with each other and link into financial systems and shared services. HUD mission data will directly feed our federal shared service provider for all accounting transactions. This will allow the alignment of program, financial, and other grants management data.

This request will also include planning for grants and loan payment processing, to include de-commissioning and replacing Line of Credit Control System (LOCCS). This effort will utilize the new enterprise architecture of the Enterprise Business Hub eliminating existing redundant technologies and streamlining current IT costs. The planning for this effort will be modeled on the HUDCAPS Decommissioning project with a 90 day planning sprint to define an Execution Roadmap, project schedule and required resources.

Business Need/Value: HUD's legacy core financial system, HUDCAPs, has not been supported by the original vendor since 2004, HUDCAPs, making it expensive and risky to maintain. A new enterprise architecture, the Enterprise Business Hub will enable efficient interfaces among systems, and provide a cost effective mechanism for future systems replacements. This will enable HUD business

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systems to be replaced by enterprise solutions in an orderly manner, while maintaining financial integrity and “doing no harm” to the HUD mission. It will improve and reduce cost of IT O&M by using common platforms and modern technologies.

Enterprise Data Warehouse (EDW): \$4.0 million

Description: HUD’s data is currently stored in numerous systems and application platforms across the agency. These “silos of data” make it very time consuming to obtain and compile information needed to conduct analysis and produce timely reports, and limit the ability to perform enterprise level analysis. There is often data duplication. Data warehousing cuts through these obstacles by integrating and organizing key operational data in a form that is consistent, reliable, timely, and readily available. An Enterprise Data Warehouse (EDW) is a large-scale data warehouse that is used across the enterprise for decision support and helps leaders to make informed decisions.

This request will support the next steps in improving the Department’s data quality and ability to analyze and report information across multiple programs. It builds upon prior investments to develop the foundation of the data warehouse, which will be a cloud-based solution. This foundation consists of enterprise data management strategy, including master data management, information architecture, analysis of alternative platform technologies, and installing the supporting infrastructure.

HUD is taking an incremental approach to implementing this multi-year program. Annual funding will support discrete, manageable projects to make it easier to manage risks associated with a larger program. Fiscal year 2017 funding will support initial planning and development for the integration of data sources across the agency. This includes funding for new capabilities required to support the implementation of the DATA Act. We are currently in the process of identifying the specific IT systems that will require modifications to conform to the DATA Act.

Business Need/Value: The Enterprise Data Warehouse will provide the following direct benefits:

- End users can perform extensive analysis in numerous ways.
- A consolidated view of corporate data (i.e., a single version).
- A data warehouse permits low cost data processing and end user ease of access by moving from costly operational systems onto a low-cost server; therefore, many more end-user information requests can be processed more quickly.
- Enhanced system performance.
- Data access is simplified and increases the ability to obtain real time information.

Unified Customer Relationship Management (CRM) Capability: \$4.0 million

Description: HUD CRM systems handle 150,000 mission-critical service requests annually for HUD stakeholders and grantees. These requests originate from all of the Department’s major business partner groups, across all HUD programs.

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This funding will allow HUD to continue to upgrade and replace multiple legacy CRM solutions with stable and reliable capabilities. The solution will improve customer service and satisfaction, ensuring that customers quickly connect to the appropriate resource that can help them. In fiscal year 2015, the Office of Single Family Program's CRM solution was redesigned. In fiscal year 2017, HUD will begin to incrementally incorporate other program offices into this solution, starting with the Real Estate Assessment Center's (REAC) Customer Assistant Sub System (CASS) CRM Tool. The enterprise CRM Solution will also begin developing a module for the Office of Fair Housing and Equal Opportunity. Additional offices and functions will be migrated onto this technology solution in the future.

HUD offices rely on their call centers, service desks and help desks to manage interactions with stakeholders, customers, business partners, and the public regarding any aspect of the Department's services. These customers and other parties include Local and State housing agencies that serve as Section 8 Contractor Administrators for HUD's assisted housing projects and the Rent Supplement and Rental Assistance programs, mortgage bankers, public interest groups, academic researchers, and resident interest groups.

Currently there are more than 40 help desks, multiple call centers and 90 toll-free telephone numbers, and no clear and unified CRM strategy. CRM involves planning, scheduling and controlling the activities between the customers, stakeholders and partners. This includes management of call centers, products, customer/accounts, contacts, profiles, and partner relationships. It also incorporates customer analytics, feedback and surveys. HUD will transform its CRM by establishing a Center of Excellence using Microsoft Dynamic CRM software, which will reduce costs and unify, improve, and streamline systems and processes. The Center for Excellence is a team of HUD employees with specialized training, allowing HUD employees to make basic adjustments to the system.

Business Need/Value: This unified system will improve business cohesion among program offices, which will allow for a more consistent response to customers and overall a better customer experience. These systems provide important information to HUD for use in budget formulation and justification as well as a better understanding of programmatic impacts on the ground, allowing a line of sight for HUD staff to analyze data from a national, regional, or field office. The integrated communications channel allows for defining and categorizing user calls, addressing and resolving user problems across the Department, developing an enterprise-wide customer profile, and maintaining a knowledge database. It will give HUD's customers more seamless and consistent customer service, allowing them to more easily find relevant resources and information.

Grants Management System Consolidation: \$2.5 million

Description: HUD has established a vision and the elements of a plan for modernizing the grants management business function and is making notable progress in moving from a 'stove-piped' IT system architecture to one that consolidates project planning, set-up and funding, reporting and oversight for all HUD grant programs.

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Currently, there are numerous grants management systems throughout the Department, with many isolated and lacking integration of functionality, data, and technology. Redundancy in system functions unnecessarily drive up maintenance costs, while inflexibility of system architecture drives up development costs to add new programs or address regulatory changes. HUD will seek an enterprise grants management solution that reaches across multiple program areas, by analyzing common business processes, leveraging mature technologies, and reducing duplicative systems to decrease costs and infrastructure complexity.

The fiscal year 2017 request provides partial funding to begin the process of consolidating the separate grant systems. Building on the work already completed, HUD will conduct discovery, alternatives analysis and develop requirements and design processes that meet business requirements and capabilities, are stable and flexible against future program requirements, and are less costly to maintain. HUD is considering a consolidated system architecture that would be built to support the Department's plans for a holistic grants management approach that aligns systems, business processes, and requirements across the enterprise. If this architecture is selected, additional funding would be required to finalize requirements, fully implement the consolidated system architecture, and complete the retirement of replaced legacy systems.

Business Need/Value: As a result of system fragmentation, HUD does not present a single business front or 'portal' to customers. The successful execution of grants management function will enable HUD to more effectively administer the entire grant lifecycle of formula and competitive programs that altogether provide billions of grant dollars annually to communities nationwide. Grants management IT systems help achieve significant cost savings for both grantees and HUD by automating administrative functions, easing the user experience and enhancing business capabilities. This project will ultimately consolidate the functionality needed to manage and process all of HUD's grants. It will also allow planning for decommission of legacy or functionally duplicative systems and capabilities. Along with separate general ledger and funds management enhancements, this will allow the HUDCAPS legacy system to be de-commissioned. It will be replaced with systems that can interface directly with each other and link into financial systems and shared services—allowing the alignment of program, financial, and other grants management data.

Affirmatively Furthering Fair Housing (AFFH) Initiative: \$1.5 million

Description: Section 808(e) (5) of the Fair Housing Act requires Housing and Urban Development programs to be administered in a way that will Affirmatively Further Fair Housing (AFFH). For HUD program participants to meet the AFFH regulatory requirements, in fiscal year 2016, HUD has designed and developed an AFFH user interface tool that is integrated with the existing AFFH geospatial mapping data tool. This tool includes a template that grantees will use to submit their plans, enabling them to electronically file their Assessments of Fair Housing (AFHs).

The requested funds will develop the processes to effectively use this new user interface tool, provide for the review and approval workflow for HUD analysts, and integrate the AFFH tool set with existing HUD systems. New capabilities will include an Internal User

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Analysis Module, AFFH comprehensive workflow, response template, dashboard and reporting module, custom map capability and a public housing authority (PHA) template and State template.

Information submitted by the grantees and the Public Housing Authorities for the Implementation of AFFH will be analyzed to ensure the evaluation and reviews needed to assess their eligibility for funding flows to the right part of the organization. It will also ensure that the assessment and business intelligence capabilities are available to understand the AFFH's effectiveness and challenges.

Business Need/Value: Electronic filing of AFHs through a web-based tool to allow program participants to efficiently submit files required by the new AFFH rule, with data and maps integrated into the analysis. A uniform format and digital submission will also make HUD's review of submissions more efficient and timely, allowing for immediate access by the appropriate staff. The anticipated external user base is approximately 5,500 users that will include public housing authorities, local governments, and states that receive Community Development Block Grants, HOME Investments Partnership Grants, Emergency Solutions Grants, and Housing Opportunities for Persons with AIDS grants. The HUD internal user base is approximately 1,000 users. The AFFH tool will facilitate cross program collaboration between the Office of Fair Housing and Equal Opportunity, Office of General Counsel, Office of Public and Indian Housing, Office of Community of Planning and Development and others to review AFH submissions. As a result, the AFFH tool will have a total user base of up to 6,500 end users.

The development of this new user interface will capture the information that is being submitted by the grantees and the Public Housing Authorities for the Implementation of AFFH, and ensure that the evaluation and reviews needed to assess their eligibility for funding flows to the right part of the organization.

Next Generation Management System (NGMS): \$1.5 million

Description: This request is to develop the Operating Subsidy module of the Next Generation Management System (NGMS). This system enables HUD to better carry out mission critical programs by providing Enterprise Program & Financial Management capability. This initiative will automate business processes to improve the way HUD collects, analyzes and uses information to reduce Public Housing Authority (PHA) reporting burden and allow HUD staff to more effectively use data in making day to day decisions.

The Public & Indian Housing (PIH) program awards approximately \$4.6 billion annually to PHAs to cover day-to-day operational expenses associated with their inventory of 1.1 million public housing units. The funding is also used for required administrative and program implementation expenses. PIH outsources the tool used for processing of the Public Housing Operating Fund applications by means of a business support contract. Although HUD owns the data in this operating fund process, it does not own the tool. The enhancements to NGMS will provide a HUD-owned IT system to calculate and process operating subsidy applications. This will make HUD more agile and not dependent on additional funding and contract actions to make needed modifications to the system in the future.

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Business Need/Value: The Public Housing and Housing Choice Voucher Programs serve more than 3 million households and spends about \$24 billion annually. NGMS is part of a systematic approach to improve existing business processes in the areas of program and financial management, and budget execution for PIH's Housing Choice Voucher and Public Housing programs. The system enhancements that result from the initiative will be more robust, comprehensive, secure, and reliable than the current ones, which are built using Microsoft Tools like Excel, Access, Infopath and SharePoint. Although the tools can be effective, they are limited in their ability to be enterprise IT solutions. The new Operating Subsidy module will break PIH's reliance on an annual \$1.3 million contract with a third party vendor to process more than 7,000 applications, with continual cost increases.

HUD Enterprise-Wide Records Management System (HERMS): \$1.0 million

Description: Many HUD program offices still manage paper records and files. We estimate that there are more than 8,500 5-drawer filing cabinets used, which include files for low-income unit rentals, tenant information, public housing management, affordable housing vouchers, Fair Housing Complaints, and grant applications. These file cabinets also house internal office files, maps, blueprints, personnel and administrative files. Federal agencies are required to improve the management of government records, to include maximizing the use of electronic records. The current request will be used to design a system to consolidate and organize records across the entire agency. The final result will be an enterprise wide automated system where HUD's official records are digitized and stored, and employees are able to quickly and efficiently locate and retrieve these records.

Business Need/Value: HERMS funding will allow HUD to design an enterprise system that will improve the quality and use of federal information to strengthen decision making, accountability, and responsiveness to the public. The system will reduce costs associated with storing volumes of paper records at NARA facilities, internal hosting and storage, and the costs to duplicate paper-based archives in response to public inquiries and FOIA requests.

Benefits and cost savings realized may be between \$250,000 and \$300,000 annually and would be measured by substantial reduction or elimination of traditional paper-based storage and archiving expenses, currently exceeding millions of dollars annually. It will also reduce the workload of the government staff required to procure and monitor contracts. This is particularly important during major organizational changes, such as the Multifamily Transformation where HUD experienced the movement of several hundred offices files transferred from one closing office to a consolidation location. In addition to reductions in staff resources to procure and manage multiple contracts which provide duplicative services and functions, this system will better enable HUD to meet legislative (Freedom of Information Act and Paperwork Reduction Act) and regulatory mandates.

FHEO Section 3 Performance Evaluation and Registration: \$0.50 million

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Description: Funds are requested for revisions that will be needed to the Section 3 Performance Evaluation and Assessment Reporting System (SPEARS), which is used by recipients of HUD funds to submit required Section 3 annual summary reports (Form 60002).

The objectives of Section 3 of the Housing and Urban Development Act of 1968 are (1) to use HUD program funds to provide a springboard for residents to become economically empowered through direct participation in construction and other activities designed to physically improve and revitalize their neighborhoods; and (2) to leverage HUD funds to strengthen local economies, promote self-sufficiency, and reduce dependency on Federal housing subsidies.

HUD expects to issue a revised Section 3 rule in fiscal year 2016 that will clarify fair housing obligations and reduce barriers to compliance. It will help communities analyze their own challenges to fair housing choice and establish their own goals and priorities to address their fair housing barriers. To adhere to this Rule, development funds are needed to address necessary system changes.

Another component of SPEARS is the Section 3 Business Registry. This is a tool that HUD launched in fiscal year 2014 to meet regulatory obligations to notify Section 3 businesses of the availability of local HUD-funded contracts and to increase the amount of contracts awarded to Section 3 businesses. The funds are requested to modify the existing SPEARS to comply with changes to Form 60002 and the Business Registry based on the new rule. Revisions might include changes to questions, template formats or screens, data fields, reporting content, formats, and workflow. These changes may affect the Business Registry as well as the Form 60002.

Business Need/Value: There are about 5,000 covered grantees who receive funds that are subject to Section 3 and are required to submit Form 60002 to HUD. There are also about 1,000 businesses who have self-certified that they meet one of the definitions of a Section 3 business. The systems enhancements to SPEARS will save grantees and businesses time and effort, and will promote consistency in compliance with the revised regulatory requirements.

Appendix: Description of IT Portfolio Business Segments

The Acquisition Management segment: Enables HUD to effectively manage the lifecycle (e.g., purchasing, tracking, maintenance, and replacement/retirement) of the physical goods and contracted services it acquires in support of delivering its services and executing its programs. The Acquisition Management segment includes goods acquisition, inventory control, logistics management, and services acquisition.

The Administrative Management segment: Enables the IT that performs administrative and logistical services supporting the entire HUD workforce/enterprise. The IT in this segment includes facilities, fleet and equipment management systems and tools, help desk services, security management, travel and workplace policy development and management systems and tools.

The Business Analytical Services segment: Includes the tools and capabilities supporting the extraction, aggregation, and presentation of information to facilitate decision analysis and business evaluation. The Business Analytical Services segment includes analysis and statistics, visualization (geospatial), knowledge discovery, business intelligence and reporting.

The Controls & Oversight segment: Provides the tools that provide and promote the effective use of accurate, timely and reliable information assessing the condition of the Department's housing portfolio—serving both the Office of Public and Indian Housing (PIH) and the Office of Multifamily Housing (MFH). The systems provide information to inform decisions for efficient and effective use of HUD's program dollars to ensure safe, decent and sanitary conditions in affordable housing and assists

The Customer Relationship Management Services segment: Includes the tools and systems involved in planning, scheduling, and controlling the activities between the customer and the enterprise, both before and after a product or service is offered. The Customer Relationship Management Services segment would include tools that support call center management, customer analytics, sales and marketing, product management, brand management, customer/account management, contact and profile management, partner relationship management, customer feedback and surveys.

The Data Management Services segment: Includes capabilities that provide for the usage, processing and general administration of information. The Data Management Services segment includes data exchange, data mart, data warehouse, meta data management, data cleansing, extraction and transformation, loading and archiving, data recovery and data classification.

The Digital Asset Services segment: Defines the set of capabilities to support the generation, management, and distribution of intellectual capital and electronic media across the business and extended enterprise. The Digital Asset Services segment includes content management, document management, knowledge management, and records management.

The Financial Management segment: Includes the systems and tools that support the management of HUD's financial resources control and the flow of financial information across information systems. The Financial Management segment includes accounting, funds control, payments, collections and receivables, asset and liability management, reporting and information, and cost accounting/performance measurement.

The Grants Management segment: Includes the IT systems and tools that support the notification, submission, award, review and completion of HUD's grant programs, including the large grant programs that support community development, the construction and rehabilitation of homes, community structures and infrastructure, and other community revitalization and job

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creation efforts to preserve community assets. This segment also supports HUD's programs that help communities prevent/end homelessness, provide education and awareness programs on lead safety, counseling new home buyers and support fair and equitable housing programs.

The Human Resource Management segment: Includes the systems and tools that manage human resources strategy, staff acquisition, organization and position management, compensation management, benefits management, employee performance management, employee relations, labor relations, separation management, and human resources development.

The Information Technology segment: Includes the hardware, software, infrastructure and services (communications networks, systems engineering, security services) to effectively provide IT capabilities that run the business and administrative applications as well as the enterprise-wide capabilities (email, enterprise licenses, etc.) necessary to execute our mission. The Information

Technology segment includes system development, lifecycle/change management, system maintenance, IT infrastructure maintenance, information security, record retention, information management, information sharing, and system and network monitoring.

The Mortgage Insurance segment: Provides automated operation of FHA mortgage insurance and housing financing functions, including underwriting, participant performance, risk management, and financial and asset management. The systems in this segment execute the operations of FHA and Housing programs that sustain homeownership and affordable housing.

The Planning & Budgeting segment: Includes the tools and systems that support budget formulation, capital planning, enterprise architecture, strategic planning, budget execution, workforce planning, management improvement, budget and performance integration, and tax and fiscal policy.

The Public Affairs segment: Includes the systems and tools that support the exchange of information and communication between the federal government, citizens and stakeholders in direct support of citizen services, public policy, and/or national interest. The Public Affairs segment includes customer services, official information dissemination, product outreach, and rule publication.

The Regulatory, Legislative & Enforcement segment: Includes the tools and systems that monitor and oversee HUD sponsored programs; developing regulations, policies, and guidance to implement laws; and developing and tracking, and amendment of public laws.

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The Subsidies Management segment: Includes the tools and systems that support the development and management of programs that provide housing assistance to citizens including the rental of single family and multifamily properties, and the management and operation of federally supported housing properties.

4. Proposals in the Budget

Not Applicable.

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

<u>Budget Activity</u>	<u>2015 Budget Authority</u>	<u>2014 Carryover Into 2015</u>	<u>2015 Total Resources</u>	<u>2015 Obligations</u>	<u>2016 Budget Authority</u>	<u>2015 Carryover Into 2016</u>	<u>2016 Total Resources</u>	<u>2017 Request</u>
Operations and Maintenance	\$250,000	\$101,388	\$351,388	\$278,739	\$250,000	\$76,649	\$326,649	\$250,000
Development, Modernization, and Enhancement	<u>49,513</u>	<u>49,513</u>	<u>22,855</u>	...	<u>26,658</u>	<u>26,658</u>	<u>36,000</u>
Total	250,000	150,901	400,901	301,594	250,000	103,307	353,307	286,000

NOTES

1. Operations and maintenance carryover into 2015 includes \$2.84 million of recaptures and \$2.5 million of transfers from Salaries and Expenses. All funds that are available for either O&M or DME are included as O&M carryover.
2. Operations and maintenance carryover into 2016 includes \$4 million in anticipated recaptures. All funds that are available for either O&M or DME are included as O&M carryover.

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**INFORMATION TECHNOLOGY FUND
Appropriations Language**

The fiscal year 2017 President's Budget includes proposed changes in the appropriation language listed and explained below. New language is italicized and underlined, and language proposed for deletion is bracketed.

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~~ *\$286,000,000, of which \$239,000,000* shall remain available until September 30, ~~[2017]~~ *2018, and [~~\$48,000,000~~ \$47,000,000 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. (*Department of Housing and Urban Development Appropriations Act, 2016.*)