FY 2016

CONGRESSIONAL BUDGET JUSTIFICATION

DOL IT MODERNIZATION

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DOL IT MODERNIZATION

TABLE OF CONTENTS

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DOL IT MODERNIZATION

APPROPRIATION LANGUAGE

 For necessary expenses for Department of Labor centralized infrastructure technology investment activities related to support systems and modernization, **[$15,394,000]** *$119,602,000 which shall be available through September 30, 2017. (Department of Labor Appropriations Act, 2015)*

DOL IT MODERNIZATION

SUMMARY OF CHANGES
(Dollars in Thousands)

	2015	2016	Net Change
Budget Authority			
General Funds	$15,394	$119,602	+$104,208
Total	$15,394	$119,602	+$104,208
Full Time Equivalents			
General Funds	0	0	0
Total	0	0	0

			2016 Change					
Explanation of Change	**2015 Base**		**Trust Funds**		**General Funds**		**Total**	
	FTE	**Amount**	**FTE**	**Amount**	**FTE**	**Amount**	**FTE**	**Amount**
Increases:								
A. Built-Ins:								
To Provide For:								
Costs of pay adjustments	0	$0	0	$0	0	$0	0	$0
Communications, utilities, and miscellaneous charges	0	$0	0	$0	0	$0	0	$0
Printing and reproduction	0	$0	0	$0	0	$0	0	$0
Advisory and assistance services	0	$8,929	0	$0	0	$0	0	$0
Other services from non-Federal sources	0	$0	0	$0	0	$0	0	$0
Other goods and services from Federal sources	0	$0	0	$0	0	$0	0	$0
Operation and maintenance of facilities	0	$0	0	$0	0	$0	0	$0
Operation and maintenance of equipment	0	$3,465	0	$0	0	$0	0	$0
Equipment	0	$3,000	0	$0	0	$0	0	$0
Built-Ins Subtotal	**0**	**+$15,394**	**0**	**$0**	**0**	**$0**	**0**	**$0**
B. Programs:								
Voice over Internet Protocol and Video Teleconferencing and Wireless Access	0	$0	0	$0	0	$43,384	0	$43,384
To provide for the Digital Government Integrated Platform	0	$0	0	$0	0	$40,324	0	$40,324
To provide for Level Road Enforcement Database Integration with DGIP	0	$0	0	$0	0	$12,500	0	$12,500
To provide for Level Road Cloud Platform	0	$0	0	$0	0	$8,000	0	$8,000
Programs Subtotal			**0**	**$0**	**0**	**+$104,208**	**0**	**+$104,208**

DOL IT MODERNIZATION

2016 Change

Explanation of Change	2015 Base		Trust Funds		General Funds		Total	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
Total Increase	**0**	**+$15,394**	**0**	**$0**	**0**	**+$104,208**	**0**	**+$104,208**
Decreases:								
A. Built-Ins:								
To Provide For:								
Built-Ins Subtotal	**0**	**$0**	**0**	**$0**	**0**	**$0**	**0**	**$0**
B. Programs:								
Total Decrease	**0**	**$0**	**0**	**$0**	**0**	**$0**	**0**	**$0**
Total Change	**0**	**+$15,394**	**0**	**$0**	**0**	**+$104,208**	**0**	**+$104,208**

ITM - 3

DOL IT MODERNIZATION

	2014		2015		2016		Diff. 2016 / 2015	
	FTE	**Amount**	**FTE**	**Amount**	**FTE**	**Amount**	**FTE**	**Amount**
Departmental Support Systems	**0**	**4,898**	**0**	**4,898**	**0**	**4,898**	**0**	**0**
General Funds	0	4,898	0	4,898	0	4,898	0	0
IT Infrastructure Modernization	**0**	**14,880**	**0**	**10,496**	**0**	**53,880**	**0**	**43,384**
General Funds	0	14,880	0	10,496	0	53,880	0	43,384
Digital Government Integrated Platform Initiative	**0**	**0**	**0**	**0**	**0**	**60,824**	**0**	**60,824**
General Funds	0	0	0	0	0	60,824	0	60,824
Total	**0**	**19,778**	**0**	**15,394**	**0**	**119,602**	**0**	**104,208**
General Funds	**0**	**19,778**	**0**	**15,394**	**0**	**119,602**	**0**	**104,208**

SUMMARY BUDGET AUTHORITY AND FTE BY ACTIVITY
(Dollars in Thousands)

NOTE: 2014 reflects actual FTE.

DOL IT MODERNIZATION

		2014	2015	2016	Diff. 2016 / 2015
	BUDGET AUTHORITY BY OBJECT CLASS (Dollars in Thousands)				
	Full-Time Equivalent				
	Total	0	0	0	0
11.1	Full-time permanent	0	0	0	0
11.9	Total personnel compensation	0	0	0	0
23.3	Communications, utilities, and miscellaneous charges	0	0	0	0
24.0	Printing and reproduction	0	0	0	0
25.1	Advisory and assistance services	19,313	8,929	34,329	25,400
25.2	Other services from non-Federal sources	0	0	0	0
25.3	Other goods and services from Federal sources 1/	0	0	0	0
25.4	Operation and maintenance of facilities	0	0	0	0
25.7	Operation and maintenance of equipment	465	3,465	35,889	32,424
31.0	Equipment	0	3,000	49,384	46,384
	Total	**19,778**	**15,394**	**119,602**	**104,208**
1/Other goods and services from Federal sources					

DOL IT MODERNIZATION

APPROPRIATION HISTORY (Dollars in Thousands)					
	Budget Estimates to Congress	House Allowance	Senate Allowance	Appropriations	FTE
2012					
Base Appropriation	$25,000	$0	$0	$19,814	0
2013					
Base Appropriation	$21,852	$0	$0	$18,778	0
2014					
Base Appropriation	$20,587	$0	$0	$19,778	0
2015					
Base Appropriation	$30,578	$0	$0	$15,394	0
2016					
Base Appropriation	$119,602	$0	$0	$0	0

DOL IT MODERNIZATION

OVERVIEW

Introduction

The Department of Labor (DOL) Information Technology (IT) Modernization program supports the consolidation of the Department's IT infrastructure as well as its ongoing transformation into a 21st Century digital environment that works better and costs less.

Over the past three years, the Department has been working to develop a common IT infrastructure that eliminates redundancy across DOL agencies. However, this infrastructure still lacks basic tools and functionalities, such as sufficient bandwidth, tools for data-sharing, and capacity for mobile computing. Additional investments are critical for DOL to be able to meet its strategic goals and provide better, faster, and smarter service to the American public.

The Budget requests $119,602,000, an increase of $104,208,000, to support the Department's information technology program. Activities include:

- *IT Infrastructure Modernization.* DOL needs a reliable, secure, well-performing network infrastructure that all its IT activities can rely on. Funds are requested for data and voice communications capacity, wireless infrastructure, video teleconferencing, and infrastructure to support use of mobile devices.

- *A Digital Government Integrated Platform (DGIP).* Funds are requested to build a common digital platform that can be used by all DOL employees to share and store data. Currently, most employees must tap into agency-specific systems and databases from their desktops if they want to access information. A common platform hosted centrally would facilitate data sharing and mobile computing. The DGIP would also give each agency a set of integrated enterprise services that would support efforts to build and deploy agency-specific applications. Additional DGIP capabilities include:

  - Management of digital data assets (images, audio, and video).
  - Data model, repository and analytical support.
  - Mobile device management and mobile content management.
  - Expanded records management

  The shared platform that DGIP provides will also allow DOL to launch a new initiative to standardize and centralize its enforcement data. This data is currently housed in separate databases within DOL's enforcement agencies, which is costly and hinders communication and sharing of information between agencies. The infrastructure changes will allow better modeling in DOL agencies to separate entities that are truly bad actors with willful violation from those that may just need assistance in understanding what they need to do to be compliant with the nation's various labor laws. The request includes funds for a cloud-based, enterprise-wide enforcement database, which will standardize the DOL-wide data that will be available to identify agencies that have violations across

DOL IT MODERNIZATION

DOL enforcement programs as well as support efforts to improve compliance with labor laws in companies that contract with the Federal government.

These new investments are paired with requests for additional telecommunications bandwidth necessary to support these activities ($16,000,000 requested in the Working Capital Fund account) and Federal staffing to manage implementation (11 FTE and $2,020,000 in the Departmental Management account). Without this underlying enabling technology, a patchwork of redundant digital modernization investments will result and be available to only a limited number of DOL agencies and staff.

Historically, the Department has operated with multiple agency-based IT infrastructures with very little centralization or standardization. This infrastructure model makes it difficult to maximize 21st century tools to support DOL programs because IT solutions cannot be shared across agencies without significant investment of resources. Before DOL started on an infrastructure consolidation effort three years ago, the Department largely used technology the way it did a decade ago to administer Federal labor laws to guarantee workers' rights to safe and healthful working conditions; a minimum hourly wage and overtime pay; freedom from employment discrimination; and unemployment insurance. Some agencies have been sporadically implementing new technology using a variety of solutions as funds are available, but this opportunistic approach has yielded incompatible technology, redundant services that are not interoperable, and redundant fixed costs that are spread over a small numbers of users. Work will continue to complete ongoing initiatives including implementation of Department-wide systems and services using shared service providers and cloud technology, integration of DOL's nine separate infrastructures, and consolidation of DOL's data centers.

These resources will move the Department's efforts in all areas forward whether by providing OSHA field investigators with tablets and systems to capture and share evidence through video and photographs, giving ETA data and automated tools to effectively monitor program data across 53 jurisdictions in the unemployment insurance system, or simply reducing unnecessary overhead costs. They will improve the effectiveness of agency inspections and investigations while providing technology to match what is expected by the legal system as enforcement actions move through due process proceeding. They will allow for improved technical assistance to the workforce development system including sharing of best practices among the States on the front line of delivering those services to the public. Ultimately, these investments will have strong returns for vast segments of the American public.

DOL IT MODERNIZATION

Below is a table that identifies all of the funding increases for the components of the IT modernization and Digital Government Integrated Platform initiatives throughout the Budget:

Digital Platform Increase by Fund Source	Fund Source	FTE	Dollars (In $000)
VoIP, VTC, and Wireless Infrastructure	ITM (ITIM)	0	43,384
Digital Data Asset Management	ITM (DGIP)	0	6,000
Data Model, Repository, Analytics	ITM (DGIP)	0	9,000
Mobility	ITM (DGIP)	0	14,324
Mobile Computing Devices	ITM (DGIP)	0	7,000
Records Management	ITM (DGIP)	0	4,000
Enforcement Database Integration	ITM (DGIP)	0	12,500
Cloud Platform Acquisition	ITM (DGIP)	0	8,000
	Subtotal ITM		**104,208**
Increased Bandwidth	WCF	0	16,000
	Subtotal WCF		**16,000**
OASAM S&E FTE for Digital Government Platform	DM/OASAM/S&E	11	2,020
	Subtotal S&E		**2,020**
Total Digital Platform ITM, WCF and S&E		**11**	**122,228**

The Department is requesting that these funds remain available for two years to support effective implementation.

DEPARTMENTAL SUPPORT SYSTEMS

	2014	2015	2016	Diff. 2016 / 2015
Activity Appropriation	**4,898**	**4,898**	**4,898**	**0**
FTE	0	0	0	0

Introduction

The Departmental Support Systems activity supports enterprise-wide information technology initiatives that facilitate common business solutions for all agencies in the Department. The Office of the Chief Information Officer manages this account as well as the other accounts in the IT Modernization budget.

New and ongoing enterprise efforts in the planning, development, and/or implementation phases that will be supported in FY 2016 include Enterprise Architecture, Identity and Access Management, and project planning and execution of common enterprise solutions such as a common mobile application platform. These initiatives will continue in FY 2016, building on prior year investments and move toward the next phase of full implementation.

DOL Consolidated Enterprise Architecture Program Management: Overall, Enterprise Architecture provides the basis upon which sound business and IT decisions can be made by ensuring IT investments are aligned with DOL strategic objectives. It also facilitates simplified and redesigned work processes that result in higher quality, more effective customer services, reduced operational complexity, and reallocation of budget resources to higher value applications.

From a practical perspective, the enterprise architecture work is essential to support DOL's IT Modernization. With integration of DOL infrastructures and consolidation of data centers, as well as the dynamic development of the Digital Government Integrated Platform, continual refinement of the Enterprise Architecture, with technical standards for consolidated new and evolving IT services, is a critical function in the management of DOL's IT investments assisting our Agencies in meeting it's critical mission needed through the use of current and advanced technology.

Identity and Access Management HSPD-12: DOL's implementation of the Identity and Access Management (IAM) component of HSPD-12 helps to protect employees' identities through uniform identity life cycle management services, rigorous identity-proofing and authorized access to DOL IT systems. Funding in FY 2016 will support the development and implementation activities that further the initiative's goals of making Identity Management and Provisioning services available to a wide range and enterprise-wide solutions in use by DOL. These goals include (a) Application Provisioning, (b) Single Sign-on for all integrated applications, and (c) Digital Identity Management for both federal and contract employees.

Project Planning and Proof of Concept for a Common Mobility Platform: DOL agencies are embracing mobility technology as a smarter way to work and meet the needs of their mission.

DEPARTMENTAL SUPPORT SYSTEMS

Some DOL agencies have independently initiated and implemented various components of a mobility platform, depending on funding availability and mission priorities. These platforms are not standard, not interoperable, and not uniformly available across DOL agencies. The proposed investment will provide funding to plan and complete the proof of concept for an integrated, standardized and efficient approach to providing secure nationwide mobile access to all DOL agencies and offices in over 464 office locations throughout the U.S.

Five-Year Budget Activity History

Fiscal Year	Funding	FTE
	(Dollars in Thousands)	
2012	$11,829	0
2013	$11,195	0
2014	$4,898	0
2015	$4,898	0

FY 2016

DOL Consolidated Enterprise Architecture Program Management: In FY 2016, the Enterprise Architecture Program Management, in accordance with Departmental priorities, will build upon current activities to provide visibility of data to support performance results and return on investments; promote the value and use of enterprise architecture to senior management so they are able to make better organizational strategic planning and policy formulation decisions; use enterprise architecture to foster information sharing, identify potential consolidation, re-use, cost-saving, technology advancement, and cost-avoidance opportunities.

*Identity and Access Management***:** DOL's implementation of the Identity and Access Management (IAM) component of HSPD-12 helps to protect employees' identities through uniform identity life cycle management services, rigorous identity-proofing and authorized access to DOL IT systems. With the requested funds in FY 2016, DOL plans to implement IAM-Identity Management cloud-based services enabling the integration of core DOL enterprise wide systems (e.g. Learning Link, New Core Financial Management System and WebTA), into an enterprise IAM framework to support application provisioning and single sign on for all integrated applications, and digital identity management for all DOL users.

Project Planning and Proof of Concept for a Common Mobility Platform: DOL's work environment and workforce will continue to change and evolve in FY 2016, including expanded use of telework and flexible work hours, and duties that require more immediate access to tools and systems in the regions, during travel and site visits, and available office space for use by our employees. The funding requested in FY 2016 will allow the Department to begin the piloting and build-out of the common operating and technical environment needed to allow the expanded use of advanced mobile devices as Government Furnished Equipment (GFE); and the continued evaluation of non-GFE devices to conduct DOL business, including mission-critical functions.

DEPARTMENTAL SUPPORT SYSTEMS

FY 2015

The FY 2015 funding level provides for new and ongoing enterprise-wide investments that are typically enterprise-wide efforts in the planning, design, development, and/or implementation phases. Once a DSS investment achieves steady state (i.e., Operations and Maintenance Stage), it is removed from this funding eligibility and begins to receive funding from the investment users or its beneficiaries.

Initiatives supported by the DSS FY 2015 funding level are:

DOL Consolidated Enterprise Architecture Program Management: In FY 2015, the Enterprise Architecture Program Management, in accordance with Departmental priorities, will continue to plan, socialize and design target architectures for the consolidated IT infrastructures. This includes projects, such as defining the Unified Active Directory Target Architecture, completing recommended network and security assessment findings to support existing and future initiatives such as wireless, VoIP/Unified Communications (UC), Mobile Devise Management (MDM), VTC and VDI; and researching eDNS (electronic Domain Name Services) offerings from vendors, such as Akamai and analyzing whether this service can supplement existing DNS infrastructure. The scope of this analysis will also include performance analysis of current DOL DNS infrastructure and recommendations to augment it if required.

Identity and Access Management: DOL's implementation of the Identity and Access Management (IAM) component of HSPD-12 helps to protect employees' identities through uniform identity life cycle management services, rigorous identity-proofing and authorized access to DOL IT systems. Thus far in FY 2015 the IAM Logical Access Control has been deployed providing approximately 80% of DOL users the capability to logon to their network account using their PIV card and PIN. Moving forward in FY 2015, the IAM project will continue working with the Office of the Inspector General and the Bureau of Labor Statistics to deploy PKI components to enable their users to logon to their network accounts with the PIV cards and PINs which will result in PIV card enablement for approximately 95% DOL users. We will implement the IAM communications and training plan and strategy to ensure all users are prepared for the change in how they access their network accounts as well as prepare them for IAM Phase II: PIV Card logon enforcement (Q4 FY 2015) as well as provide important communications and training to the Enterprise Help Desk enabling them to provide support to our users. Additionally, we will focus on interoperability of the Department's remote solutions and mobile devices with the IAM Logical access control solution.

Project Planning and Proof of Concept for Mobility Platform: DOL agencies are embracing mobility technology as a smarter way to work. For the Office of Workers' Compensation Programs (OWCP), the 2012 Hurricane Sandy event demonstrated the benefit of an integrated IT solution that allowed New York City employees to telework while the office was closed for several days. Using an integrated toolkit that consisted of the Agency's workers' compensation system, digital compensation claim file repository and Interactive Voice Response (IVR) system, claims examiners in the Division of Federal Employees' Compensation (DFEC) were able to continue to process and route claims working remotely from home, minimizing the disruption to compensation claimants and beneficiaries. The IVR system allowed employees to continue

making and receiving claimant calls, the workers' compensation system allowed the agency to shift some case management work to non-affected offices, while work that required hands-on printing and mailing services was re-routed via the workers' compensation system to another operational facility. Without this technology, injured workers would have waited until the offices reopened for decisions on their claims, authorizations of medical treatment, and all other actions required to intake, adjudicate, and pay their workers' compensation claims. In contrast, OWCP's Division of Longshore and Harbor Workers' Compensation (DLHWC) New York City office, without a digital compensation claim file repository or IVR, was severely limited in the number of employees who could telework, and claims work was delayed as a result. DLHWC casework was pended until the office reopened, vocational rehabilitation providers were not paid, and mediations were postponed, leaving workers waiting for assistance with their claims. DFEC had 36 staff employees teleworking - DLHWC had none.

Some DOL agencies have independently initiated and implemented various components of a mobility platform, depending on funding availability and mission priorities. These platforms are not standard, not interoperable, and not available across DOL agencies. The proposed investment will provide funding for planning and proof of concept for an integrated, efficient, and rational approach to providing nationwide mobile access to all DOL agencies and offices.

In FY 2015, DOL's focus will continue to develop the design of the required mobile infrastructure that includes the foundational mobile policies, and the finalization of the technical common infrastructure interim and production framework to allow for approved mobile device use, starting with existing GFE and refreshed GFE equipment (existing Blackberry replaced with smartphones/devices). DOL's plans in FY 2015 include: 1) Design a long-term mobile service; 2) Formalize / refine operational processes and policies; 3) Establish routine ordering/configuration processes; 4) Begin to develop a comprehensive policy set-- focus areas to address - Technology offering; Connectivity and linkage of BYOD vs. GFE; Security; Liability; e-Authentication; Governance, Human Resources/Union; Privacy; Recordkeeping and Information Management; and 5) Finalize and implement the interim mobile device solution.

FY 2014

In FY 2014 DOL implemented the Human Resources Shared Service Center; and made progress in developing and implementing the identity and access management components of HSPD-12 and planning and preparing for the consolidated Enterprise Architecture.

Initiatives funded in FY 2014 by the DSS were:

Human Resources Shared Service Center Investment: This initiative provides for the support in the migration to a shared service center (SSC) under the Human Resources (HR) Line of Business E-government initiative. In 2nd Quarter, FY 2014, DOL's HR systems successfully migrated to Treasury's Shared Service Center (SSC) and completed the project close-out. In 2005, the Office of Management and Budget (OMB) e-Gov initiative, Human Resources Line of Business (HR LOB), mandated that agencies migrate to an Office of Personnel Management (OPM)-certified shared service center to realize cost savings, streamline operations and improve

response times by consolidating administrative, repeatable HR processes and back-office services. The HR LOB solution has significantly improved the delivery of Federal HR services

HSPD-12 (Identity and Access Management): DOL's implementation of the Identity and Access Management (IAM) component of HSPD-12 helps to protect employees' identities through uniform identity life cycle management services, rigorous identity-proofing and authorized access to DOL IT systems. In FY 2014, DOL OCIO Security prioritized IAM program objectives placing an emphasis on the Federal Cross-Agency Priority (CAP) goals for Personal Identity Verification (PIV) card enforcement, as well as establishing enterprise wide requirements for IAM including prioritized systems and applications for initial IAM services roll-out. Reconstituted the DOL Technical working group comprised of representatives from all DOL agencies to re-affirm business and technical requirements and to develop and address functional IAM use cases.   As a result of these efforts, DOL executed an acquisition for Public Key Infrastructure (PKI) components, and professionals and began deployment of the Department's IAM logical access control infrastructure.

DOL Consolidated Enterprise Architecture Program Management: Overall, Enterprise Architecture provides the basis upon which sound business and IT decisions can be made by ensuring IT investments are aligned with DOL strategic objectives. It also facilitates simplified and redesigned work processes that result in higher quality, more effective customer services, reduced operational complexity, and reallocation of budget resources to higher value applications. In FY 2014, the Enterprise Architecture Program, in accordance with Departmental priorities, began to build upon work to date including network and security assessments to develop an Enterprise Architecture to guide a modernized consolidated infrastructure and 21st Century IT tools. The initiative provided visibility of data to support performance results and return on investments; promote the value and use of enterprise architecture to senior management so they are able to make better organizational strategic planning and policy formulation decisions; use enterprise architecture to foster information sharing, and identify potential consolidation, re-use, cost-saving, and cost-avoidance opportunities.

DEPARTMENTAL SUPPORT SYSTEMS

DETAILED WORKLOAD AND PERFORMANCE				
	2014		**2015**	**2016**
	Target	**Result**	**Target**	**Target**
Departmental Support Systems				
Strategic Goal ALL - All Strategic Goals				
Strategic Objective ALL.1 - All Strategic Objectives				
Percent of universal/common systems with improved functionality through enhancements	88.00%	--	88.00%	88.00%

Legend: (r) Revised   (e) Estimate   (base) Baseline   -- Not Applicable   TBD - To Be Determined   [p] - Projection

DEPARTMENTAL SUPPORT SYSTEMS

Workload Summary

The Departmental Support Systems activity bolsters the Department's mission through efforts that contribute to all strategic and outcome goals. The universal/common solutions included in the budget activity support the President's Management Agenda by improving service delivery to citizens through information technology and improving the productivity of Federal workers. Measuring the percent of systems with increased functionality through Department Support System enhancements provides for the overall success of the Department in reaching its strategic and outcome goals.

In FY 2016, it is anticipated that at the activity request level performance for improved functionality from the FY 2015 level will remain level. In FY 2014, the Human Resources Shared Service Center project was deployed and moved to Operations and Maintenance status, as was the Acquisition Management System and Idea Mill. These systems will stabilize in FY 2015 and user familiarity will increase. In FY 2016, DOL will continue enterprise level development of these initiatives and work will continue on Identity Access Management through FY 2016.

DEPARTMENTAL SUPPORT SYSTEMS

					Diff. 2016 /
BUDGET ACTIVITY BY OBJECT CLASS					
(Dollars in Thousands)					
		2014	**2015**	**2016**	**Diff. 2016 / 2015**
11.1	Full-time permanent	0	0	0	0
11.9	Total personnel compensation	0	0	0	0
23.3	Communications, utilities, and miscellaneous charges	0	0	0	0
24.0	Printing and reproduction	0	0	0	0
25.1	Advisory and assistance services	4,498	4,498	4,498	0
25.2	Other services from non-Federal sources	0	0	0	0
25.3	Other goods and services from Federal sources 1/	0	0	0	0
25.4	Operation and maintenance of facilities	0	0	0	0
25.7	Operation and maintenance of equipment	400	400	400	0
31.0	Equipment	0	0	0	0
	Total	**4,898**	**4,898**	**4,898**	**0**
1/Other goods and services from Federal sources					

DEPARTMENTAL SUPPORT SYSTEMS

CHANGES IN 2016
(Dollars in Thousands)

Activity Changes
  Built-In
    To Provide For:
    Costs of pay adjustments $0
    Communications, utilities, and miscellaneous charges 0
    Printing and reproduction 0
    Advisory and assistance services 0
    Other services from non-Federal sources 0
    Other goods and services from Federal sources 0
    Operation and maintenance of facilities 0
    Operation and maintenance of equipment 0
    Equipment 0
  Built-Ins Subtotal **$0**

  Net Program **$0**
    Direct FTE **0**

	Estimate	FTE
Base	**$4,898**	**0**
Program Increase	**$0**	**0**
Program Decrease	**$0**	**0**

IT INFRASTRUCTURE MODERNIZATION

BUDGET AUTHORITY BEFORE THE COMMITTEE				
(Dollars in Thousands)				
	2014	**2015**	**2016**	**Diff. 2016 / 2015**
Activity Appropriation	14,880	10,496	53,880	43,384
FTE	0	0	0	0

Introduction

The IT Infrastructure Modernization Program is establishing a broad and unified IT infrastructure architecture. Individual infrastructure modernization projects will rely on a services-based IT environment that will enable rapid deployment of evolving technology solutions. Over time, the projects will transform the DOL IT Infrastructure to a consolidated, common, enterprise-wide design that will reduce duplicative solutions, increase cost effectiveness, improve reliability, maintainability, and security, and transform the entire Department's capability to interact electronically with the public it serves to a level that is consistent with capabilities available to the public in the private sector.

Funding at the request level will produce significant results for two key projects: Infrastructure Services and Infrastructure Technological Improvements.

Infrastructure Services: The overall strategy of this effort is to provide a consolidated infrastructure for DOL agencies. In FY 2016, an additional $43,384,000 is requested for Voice over Internet Protocol (VoIP) deployment, capability for video teleconferencing and a wireless infrastructure across the DOL enterprise. Through these investments, DOL will provide modern IT services for its staff, and eliminate cases where DOL agencies carry large, costly, redundant, and consequently inefficient IT infrastructures and duplicate support staff. These new value-added IT capabilities will be available for all DOL agencies' staff, allowing DOL agencies to improve productivity and service to the American people.

VoIP (integrated voice and data network communications), is needed in the DOL national, regional and field office locations to provide all locations of every DOL agency with the capability to implement and utilize call centers and applications that depend on unified messaging. Unified messaging integrates different electronic messaging and communications media (e-mail, short message system (sms) text, fax, voicemail, and video messaging) to make them accessible from different devices, including a desktop computer. This provides one place to check messages and offers new flexible workflow options such as appending notes or documents to forwarding voicemails. Customer Relationship Management, Enterprise Resource Management, and mail management all make use of unified messaging. More importantly for DOL, this will provide a cost benefit by allowing the DOL to stop maintaining both voice and data lines and services, and to standardize its voice and data infrastructure. Historically, a subset of DOL agencies has had relatively more IT funding than others. The result has been uneven IT services for DOL staff in various agencies, and a variety of VoIP platforms and services individually which are incompatible and more expensive to support. DOL intends to leverage these past investments, experience and technology where cost effective, and to implement a

consolidated standard solution which will be less expensive on a per user basis due to economies of scale.

In addition to VoIP, VTC, and wireless access, another prerequisite component of digital government is infrastructure to support use of mobile devices. Most of the Digital Government Integrated Platform services are "new" proposed capabilities for DOL (e.g. DOL enforcement systems do not capture and store audio, video, and digital images – they rely on traditional brick and mortar text data.) The Department plans to invest in this segment of the mobile device management and mobile content effort in FY 2016. (Additional funding for development of an enterprise level Virtual Desktop Infrastructure solution, mobile device management and an expanded set of certified GFE mobile devices is addressed in the Digital Government Integrated Platform budget activity. This investment lays the foundation for modern mobile and data technology capabilities to be implemented in a common, consistent, standard model across DOL.

Infrastructure Technological Improvements: For this project, requested funding in FY 2016 will allow DOL to continue its progress in meeting the commitment to the Federal Data Center Consolidation Initiative, moving additional critical server production activities from mixed use buildings to a state-of-the-art data center facility. In addition to this objective, DOL will add to the number of internal networks and devices within DOL that are IPv6-capable, enabling agencies' full access to all external Internet resources needed to meet business requirements. The next phases of infrastructure integration and cloud migration will be facilitated by the experience gained over the past years and a network and security assessment completed in FY 2014. By the end of FY 2015, it is anticipated that seven of the original nine infrastructures will be integrated, and it is planned that the integration of the remaining two will be completed in FY 2016.

Five-Year Budget Activity History

Fiscal Year	Funding	FTE
	(Dollars in Thousands)	
2012	$7,985	0
2013	$7,583	0
2014	$14,880	0
2015	$10,496	0

FY 2016

In addition to the modernization activities outlined above, DOL plans to continue the organizational consolidation with the consolidation and standardization of 2 additional agencies into the OCIO's office, achieving additional Data Center Consolidation, Network Consolidation and further consolidation of IT Support staff and the associated network monitoring tools and network services such as DNS and DHCP. This will further drive standard Internet Protocol version 6 (IPv6) implementation and support across the DOL enterprise. DOL plans to:

- Continue to align the IPv6 project implementation schedule across the competing projects at DOL.

IT INFRASTRUCTURE MODERNIZATION

- Perform an internal IPv6 upgrade using a phased migration approach to IPv6 based on the standard equipment and application lifecycle.

- This approach allows DOL to migrate to IPv6 as equipment and/or applications are upgraded and would allow the costs to be spread across the distributed projects and costs centers.

DOL will continue its IT organization integration of the Bureau of Labor Statistics (BLS) and Office of Inspector General (OIG) to begin Discovery by signing the OCIO Integration Project Charter.

FY 2015

The FY 2015 Enacted Level for IT Infrastructure Modernization is $10,496,000, a decrease from the FY 2014 level of $4,384,000. In FY2015, DOL will continue to work with GSA Verizon services to address support and routing issues and provide full internal IPv6 connectivity to the public Internet. DOL is also continuing a large scale re-organization with all IT services being consolidated under the CIO's office. Within this consolidation, DOL continues to perform Data Center Consolidation (DCCI) and Network and Security Infrastructure Consolidation, IT support staff consolidation and consolidation of critical support tools to include network monitoring and reporting, network address tracking and network services such as DHCP, DNS. The consolidation and standardization achieved through these initiatives will greatly reduce the number of different tools in use and will significantly increase DOL's ability to support IPv6 throughout the enterprise. Additionally, DOL will:

- Complete the inventory of existing internal routers, switches, hardware firewalls and all other IP based devices and technologies.

- Develop an impact analysis to determine fiscal and operational impacts and risks of migrating to IPv6 internally.

- Analyze how DOL can incorporate IPv6 into on-going technology refresh cycles.

- Analyze risk for how IPv6 configuration modifications to existing production devices will affect production.

- Leverage information gathered through the Federal IPv6 working group and the Consolidated DOL Target Enterprise Architecture to meet the above goals.

- Work with DOL service providers to ensure IPv6 vendor support for products and services.

In FY 2015, DOL plans to complete the design, planning, prototyping and testing required to modernize the foundational IT infrastructure components described above. DOL will pilot its target VoIP and VTC infrastructure in two new physical office locations in the Washington, DC area - providing these capabilities to seven DOL Agencies.

IT INFRASTRUCTURE MODERNIZATION

DOL plans to complete the mobility segment architecture, define services and standards, lay out the policy framework, and integrate conceptual architecture for these services with the existing and planned DOL network and security infrastructure, complete the technology architecture impact assessment, identify scope, dependencies and sequencing of technology projects, design agency chargeback models, conduct market research and select preferred target products. The scope also includes prototype and pilot solutions, and leveraging DOL resources, products and projects in a coordinated DOL initiative.

In FY 2015, DOL is continuing the technical integration and consolidation of the following agency infrastructures (former ETA, ITC, MSHA, OFCCP, OLMS, OSHA, OWCP, and WHD). DOL found that the technical integration (and therefore efficiencies) has been hampered by the historic: lack of standardization across DOL agencies, different priorities (and therefore, different services that are partially implemented,) and lack of funding and infrastructure maintenance. The magnitude of all but the latter were anticipated. This has increased scope, cost, and affected the ability to consolidate as planned as DOL has had to stabilize the agencies' infrastructure to ensure reliable and secure continued service, before virtualizing applications and other prerequisites to migrating services to new consolidated data center or standard platforms. Additionally, in FY2015, DOL will complete the discovery phase, Analysis & Planning phase, and Transition and Implementation phase for OALJ and EBSA.

Despite the challenges above, DOL will continue its progress in meeting the commitment to the Federal Data Center Consolidation initiative, moving additional critical server production activities from mixed use buildings to the state-of-the-art data center facility.

In addition, DOL will add to the number of internal networks and devices within DOL that are IPv6-capable, enabling agencies with full access to all external Internet resources needed to meet business requirements.

The next phases of infrastructure integration and cloud migration will be facilitated by the experience gained over the past three years and a network and security assessment completed in FY 2014. By the end of FY 2015, it is anticipated that seven of the original nine infrastructures will be integrated, and planning for the integration of the remaining two will be completed. In FY 2015, the consolidated infrastructure will support 85% of DOL IT users.

FY 2014

The funding DOL received in FY 2014 resulted in significant accomplishments towards the planning and build-out of a standardized, cost and technical infrastructure to meet the IT needs of the DOL mission. A reliable and well performing network infrastructure is a prerequisite to implement a mobility strategy. Specifically, DOL has:

- Reduced the number of data centers housed in the DOL FPB national office; and added new IT services in the Consolidated Data Center in support of DOL agencies.

- Progress was made toward the ETA and MSHA technical infrastructure integration implementation.

IT INFRASTRUCTURE MODERNIZATION

- Delivered a set of Enterprise Target Architecture Assessments and Designs including but not limited to network and security infrastructure.

- Developed a DOL Strategic Records Management Plan (SRMP) that is responsive to OMB and NARA direction while also achieving maximum value for DOL stakeholders and developed an SRMP implementation plan.

As part of its Department Mobility target architecture definition, in 2014 DOL completed a lab-assessment of several alternative solutions. Specifically:

- Established an interim mobile strategy for early adopters.

- Developed initial operational processes and policies.

- Certified initial equipment options.

DOL completed nearly 100% of the IPv6 accessibility rate for public facing services (DNS, HTTP, and SMTP) as reported by the OMB and NIST status and reporting dashboard. While DOL did not achieve 100% of the OMB FY2014 goals, in alignment with IPv6 requirements set forth by OMB, DOL has:

- Supported DOL Agencies IPv6 operational effectiveness and efficiency as reflected in the IPv6 reachability monitor in NIST
    - Began an inventory assessment of all IPv6 capable devices at all DOL Sites in preparation for transition to internal IPv6 communications within DOL.

    - Created and distributed an IPv6 implementation plan for internal DOL sites in preparation for transition to internal IPv6 communications within DOL.

    - Reduced and eliminated duplicate / redundant infrastructure components through consolidation into department-wide infrastructure services (DCCI).

- Looked for improved services through the enabling technologies possible with IPv6 e.g. IPAM solution.

- Provided support to other U.S. Government agencies (EPA) in support of the FY2014 OMB mandate for IPv6.

IT INFRASTRUCTURE MODERNIZATION

DETAILED WORKLOAD AND PERFORMANCE				
	2014		**2015**	**2016**
	Target	**Result**	**Target**	**Target**
IT Infrastructure Modernization				
Strategic Goal ALL - All Strategic Goals				
Strategic Objective ALL.1 - All Strategic Objectives				
Decrease the number of servers in non-Tier 1 facility in DC Metro area	200	--	200	--
Increase the number of services moved to a cloud-based infrastructure provided as department-wide solution	2	--	2	--
Increase the percentage of DOL network infrastructure that is IPv6 enabled	100.00%	--	100.00%	100.00%
Improve customer satisfaction with remote access service	30.00%	--	30.00%	30.00%

Legend: (r) Revised   (e) Estimate   (base) Baseline   -- Not Applicable   TBD - To Be Determined   [p] - Projection

IT INFRASTRUCTURE MODERNIZATION

Workload Summary

IT Infrastructure Modernization supports all of the strategic and outcome goals of the Department. The performance measures are associated with projects that include implementing the DOL-specific Data Center Consolidation Initiative (DCCI), Internet Protocol version 6 (IPv6), and migrating more services to a centralized, cloud-based infrastructure, thus providing a platform to support telework through remote access and collaboration across the Department.

In FY 2016, DOL will measure progress of the DCCI strategy that will transition the additional agency data centers to the new data center facility. The work not only involves moving equipment to a new Tier-1 facility but consolidation of servers into fewer racks and greater use of server virtualization, reducing server inventory and overall power consumption. This overall effort will enable a better infrastructure for all agencies thus promoting all strategic and outcome goals. IPv6 funding will provide for an upgrade and configuration of publicly accessible web services and other information repositories to enable users to fully access them using the IPv6 protocol.

Additionally, the Department intends to implement mobility and collaboration capabilities across the Department and enable DOL users to collaborate in and out of the office, access their desktop and needed resources from anywhere, using any device. This requires an infusion of capital to build and integrate these capabilities into the infrastructure to increase customer service and satisfaction as a result of these new capabilities. A substantial increase in network bandwidth is requested in the Working Capital Fund to support these new digital capabilities. With the additional bandwidth in place, the funds requested in the IT Infrastructure Modernization Budget Activity will enable DOL to provide its locations with infrastructures to support Voice over Internet Protocol, wireless access, and video teleconferencing. These investments are the prerequisites for a 21st Century digital government.

IT INFRASTRUCTURE MODERNIZATION

	BUDGET ACTIVITY BY OBJECT CLASS				
	(Dollars in Thousands)				
		2014	**2015**	**2016**	**Diff. 2016 / 2015**
11.1	Full-time permanent	0	0	0	0
11.9	Total personnel compensation	0	0	0	0
23.3	Communications, utilities, and miscellaneous charges	0	0	0	0
24.0	Printing and reproduction	0	0	0	0
25.1	Advisory and assistance services	14,815	4,431	4,431	0
25.2	Other services from non-Federal sources	0	0	0	0
25.3	Other goods and services from Federal sources 1/	0	0	0	0
25.4	Operation and maintenance of facilities	0	0	0	0
25.7	Operation and maintenance of equipment	65	3,065	17,965	14,900
31.0	Equipment	0	3,000	31,484	28,484
	Total	**14,880**	**10,496**	**53,880**	**43,384**
1/Other goods and services from Federal sources					

IT INFRASTRUCTURE MODERNIZATION

CHANGES IN 2016
(Dollars in Thousands)

Activity Changes
  Built-In
    To Provide For:

Costs of pay adjustments	$0
Communications, utilities, and miscellaneous charges	0
Printing and reproduction	0
Advisory and assistance services	0
Other services from non-Federal sources	0
Other goods and services from Federal sources	0
Operation and maintenance of facilities	0
Operation and maintenance of equipment	0
Equipment	0
Built-Ins Subtotal	**$0**
Net Program	**$43,384**
Direct FTE	**0**

	Estimate	FTE
Base	**$10,496**	**0**
Program Increase	**$43,384**	**0**
Program Decrease	**$0**	**0**

DIGITAL GOVERNMENT INTEGRATED PLATFORM INITIATIVE

	BUDGET AUTHORITY BEFORE THE COMMITTEE			
	(Dollars in Thousands)			
	2014	2015	2016	Diff. 2016 / 2015
Activity Appropriation	**0**	**0**	**60,824**	**60,824**
FTE	0	0	0	0

Introduction

The 21st Century vision of DOL – and how it will do its job of promoting the welfare of the job seekers, wage earners, and retirees of the United States through improved working conditions, opportunities for employment, protecting retirement and health care benefits, and providing accurate and timely labor statistics – is very different from today's model. DOL staff have the ability to launch new ideas to boost employment for veterans and the disabled, extend minimum-wage and overtime pay rules to home-healthcare workers, and enhance transparency, but in general, they do not have new IT tools to do it with. The Digital Government Integrated Platform (DGIP) budget activity will build on the requests for basic and prerequisite IT technology--network bandwidth (Working Capital Fund request), and Voice over Internet Protocol, video teleconferencing, and wireless infrastructure (IT Infrastructure Modernization (ITIM) budget activity request)--to provide the new IT tools needed to transform the way DOL agencies provide services to the American public.

At the completion of the Digital Government Integrated Platform Initiative:

- All DOL employees in the national and regional offices will be able to collaborate and connect with their colleagues through video teleconferencing from their desktops – solving a long-time divide between national and field staff locations. VTC will provide the Office of Federal Contract Compliance Programs (OFCCP) an effective avenue for better and more frequent communication with Community Based Organizations without incurring travel costs. Administrative Law Judges can reduce both travel time and cost through "video hearings". The judges can attend hearings, listen to third parties, participate in late-breaking settlement negotiations, and be recorded by court reporters through video teleconferencing.

- The DOL IT infrastructure will support mobile workforce capabilities across its various locations (national and regional offices), and ubiquitous connectivity, allowing DOL users to work anytime anywhere – improving flexibility, efficiency, effectiveness and response time to the public. (ITIM budget activity funding request.)

- DOL employees will be able to capture audio, video, images, and location data, and integrate these digital assets with various business systems: case management, web-sites, distance learning, records management; as well as in digital courtrooms – to achieve greater efficiency in mission execution, and transition DOL to 21st century government. Occupational Safety and Health Administration (OSHA) inspectors will be able to deliver targeted content, including videos, photos, and audio on construction safety materials to workers with Low English Proficiency, who primarily use smartphones to access the Internet, and to employers

and workers using tablets on the job site. For workers with low literacy, this will enable OSHA to deliver video and animation to demonstrate safe job practices directly to their smartphones or tablets.

- DOL will conduct business electronically with the public (paperless) – improving flexibility, efficiency, effectiveness and response time to the public. DOL will deliver services to the device and media preferred by the public, including accessibility requirements.

It is important to note that the Digital Government Integrated Platform is not a proposal to custom build an internal monolithic "system." The assumption is that DOL will integrate a set of services, given that the services may be insourced, outsourced, shared and/or delivered through a cloud infrastructure as a service, platform as a service, and software as a service model. This set will be determined based on cost-benefit analysis, consistent with federal policy.

FY 2016

With FY 2016 funding of $60,824,000, the DGIP focus is to provide a virtual desktop infrastructure (VDI), mobile device management, mobile devices for DOL employees, data asset management and an analytical engine/data base platform, records management. The request includes funds for an enforcement database architecture that can be integrated into the Digital Government Integrated Platform (DGIP), and acquisition of a cloud platform to house and expand the enforcement database capability and resources across DOL and to the American public. Specific investments include:

- *Mobility architecture and mobile device management ($14,324,00),* as well as additional funds for *mobile computing devices ($7,000,000)* will facilitate the ability for employees to work remotely and use features in smart mobile devices to improve their effectiveness in the field. OSHA, MSHA, the Wage and Hour Division and other DOL enforcement agencies will use mobility solutions to catalog complaints and violations on site in real time, including photo, video, audio, or text. Mobile options will allow staff to directly reach out to workers and employers, and move to a cloud based case management and citation system, streamline processes for filing reports and submitting evidence, regardless of device, to any DOL office. Agencies can transfer efficiencies to higher value inspections and investigations and reach more sites. This would also enable agencies to deliver targeted content such as videos, photos, and audio on construction safety materials to workers with Low English Proficiency.

- *Establishing Data Asset Management ($6,000,000) and Data Model, and Repository, and Data Analytics ($9,000,000*) will enable storing, retrieving and integrating various digital media formats used by DOL agencies to support business missions: video depositions, digital courtroom video, inspection sites photographs and video, audio interviews, etc. Over 50% of DOL staff work in the field. The ability to use mobile devices to capture audio video to improve their effectiveness will be supported. DOL needs a repository for agency data which allows DOL to store and access digital assets, and data, to support content management. DOL also needs to establish data analytics

capabilities to focus resources and processes. This technology is imperative to make data driven decisions that maximize program outcomes for the public. This technology will allow DOL to fine tune its strategies and targeting of resources, through data-driven decisions, to maximize compliance with the law. For example, the Wage and Hour Division could implement a policy change to modify how it computes and assesses penalties against the worst violators, and quickly establish metrics to assess its targeting strategies to verify through data that it is putting resources into investigations where violations are occurring. The Wage Hour Division could conduct a greater number of investigations, a higher percentage of directed investigations, and more investigations in industries where the most vulnerable workers are employed.

- A ***Records management ($4,000,000)*** plan will allow the Department to implement electronic management of all permanent records. The purpose of this is to define and implement a department enterprise solution that leverages cloud email, collaboration and shared services to satisfy this requirement.

- ***Enforcement database integration and cloud platform ($20,500,000).*** Currently, within the same agency, different offices can have widely varying data definitions, standards, and encoding methods for similar kinds of data. Operating independently, these differences are not an issue; however, when integrating data, the differences have significant consequences and creating an integrated platform will establish a unified data architecture that provides a corporate level view of the regulated entities subject to DOL enforcement actions. A cloud platform will provide an environment capable of housing DOL agencies' databases and information management systems and allow data to be hosted in a secure environment, with the ability to expand storage at the terabyte level and provide cross-agency data sharing. Without a cloud platform, there will continue to be incompatible database structures, and inconsistent data standards that will hinder DOL's ability to manage data as a critical enterprise asset.

DIGITAL GOVERNMENT INTEGRATED PLATFORM INITIATIVE

Workload Summary

The Digital Government Integrated Platform (DGIP) initiative builds on the IT Infrastructure Modernization and Departmental Support System investments supporting the President's Management Agenda by improving service delivery through information technology and improving the productivity of the Federal worker and all of the strategic and outcome goals of the Department. The performance measure reflects the progress of the development of the component projects of DGIP that include mobile device and content management, virtualization of DOL worksites, and data modeling and analytics capability. As the DGIP functionality is deployed, measures will be added to address the extent of the availability of the capability**.**

The prerequisites for the DGIP are increased network bandwidth, Voice over Internet Protocol, Video Teleconferencing, and a wireless infrastructure. These capabilities are requested in the Working Capital Fund and the IT Infrastructure Modernization Budget Activity. Combined, these investments provide DOL workers with the foundation for the 21st Century digital government tools required to meet the needs of the public they serve.

DIGITAL GOVERNMENT INTEGRATED PLATFORM INITIATIVE

		2014	2015	2016	Diff. 2016 / 2015
	BUDGET ACTIVITY BY OBJECT CLASS (Dollars in Thousands)				
11.1	Full-time permanent	0	0	0	0
11.9	Total personnel compensation	0	0	0	0
23.3	Communications, utilities, and miscellaneous charges	0	0	0	0
24.0	Printing and reproduction	0	0	0	0
25.1	Advisory and assistance services	0	0	25,400	25,400
25.2	Other services from non-Federal sources	0	0	0	0
25.3	Other goods and services from Federal sources 1/	0	0	0	0
25.4	Operation and maintenance of facilities	0	0	0	0
25.7	Operation and maintenance of equipment	0	0	17,524	17,524
31.0	Equipment	0	0	17,900	17,900
	Total	**0**	**0**	**60,824**	**60,824**
1/Other goods and services from Federal sources					

DIGITAL GOVERNMENT INTEGRATED PLATFORM INITIATIVE

CHANGES IN 2016
(Dollars in Thousands)

Activity Changes
  Built-In
    To Provide For:

Costs of pay adjustments	$0
Communications, utilities, and miscellaneous charges	0
Printing and reproduction	0
Advisory and assistance services	0
Other services from non-Federal sources	0
Other goods and services from Federal sources	0
Operation and maintenance of facilities	0
Operation and maintenance of equipment	0
Equipment	0
Built-Ins Subtotal	**$0**
Net Program	**$60,824**
Direct FTE	**0**

	Estimate	FTE
Base	**$0**	**0**
Program Increase	**$60,824**	**0**
Program Decrease	**$0**	**0**