

**FY 2021**

**CONGRESSIONAL BUDGET JUSTIFICATION**

**DOL IT MODERNIZATION**

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# DOL IT MODERNIZATION

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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, [~~\$25,269,000~~]~~\$37,000,000~~, which shall be available through September 30, [~~2021~~]2022.

*(Department of Labor Appropriations Act, 2020.)*

## DOL IT MODERNIZATION

<b>AMOUNTS AVAILABLE FOR OBLIGATION</b>						
(Dollars in Thousands)						
	<b>FY 2019 Enacted</b>		<b>FY 2020 Enacted</b>		<b>FY 2021 Request</b>	
	<b>FTE</b>	<b>Amount</b>	<b>FTE</b>	<b>Amount</b>	<b>FTE</b>	<b>Amount</b>
<b>A. Appropriation</b>	<b>0</b>	<b>\$23,269</b>	<b>0</b>	<b>\$23,269</b>	<b>0</b>	<b>\$37,000</b>
Unobligated Balance Carried Forward	0	\$7,045	0	\$2,559	0	\$0
<i>Subtotal Appropriation</i>	<i>0</i>	<i>\$30,314</i>	<i>0</i>	<i>\$25,828</i>	<i>0</i>	<i>\$37,000</i>
<b>B. Gross Budget Authority</b>	<b>0</b>	<b>\$30,314</b>	<b>0</b>	<b>\$25,828</b>	<b>0</b>	<b>\$37,000</b>
<b>C. Budget Authority Before the Committee</b>	<b>0</b>	<b>\$30,314</b>	<b>0</b>	<b>\$25,828</b>	<b>0</b>	<b>\$37,000</b>
<b>D. Total Budgetary Resources</b>	<b>0</b>	<b>\$30,314</b>	<b>0</b>	<b>\$25,828</b>	<b>0</b>	<b>\$37,000</b>
Unobligated Balance	0	\$0	0	\$0	0	\$0
<b>E. Total, Estimated Obligations</b>	<b>0</b>	<b>\$30,314</b>	<b>0</b>	<b>\$25,828</b>	<b>0</b>	<b>\$37,000</b>

# DOL IT MODERNIZATION

## SUMMARY OF CHANGES

(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Request	Net Change
<b>Budget Authority</b>			
General Funds	\$25,269	\$37,000	+\$11,731
<b>Total</b>	\$25,269	\$37,000	+\$11,731
<b>Full Time Equivalents</b>			
General Funds	0	0	0
<b>Total</b>	0	0	0

Explanation of Change	FY 2021 Change							
	FY 2020 Base		Trust Funds		General Funds		Total	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
<b>Increases:</b>								
<b>A. Built-Ins:</b>								
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	\$7,585	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	\$14,819	0	\$0	0	\$0	0	\$0
Equipment	0	\$2,865	0	\$0	0	\$0	0	\$0
<b>Built-Ins Subtotal</b>	<b>0</b>	<b>+\$25,269</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>
<b>B. Programs:</b>								
To provide for IT Modernization	0	\$0	0	\$0	0	\$11,731	0	\$11,731
<b>Programs Subtotal</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>+\$11,731</b>	<b>0</b>	<b>+\$11,731</b>
<b>Total Increase</b>	<b>0</b>	<b>+\$25,269</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>+\$11,731</b>	<b>0</b>	<b>+\$11,731</b>
<b>Decreases:</b>								
<b>A. Built-Ins:</b>								
To Provide For:								
<b>Built-Ins Subtotal</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>

# DOL IT MODERNIZATION

Explanation of Change	FY 2021 Change							
	FY 2020 Base		Trust Funds		General Funds		Total	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
<b>B. Programs:</b>								
<b>Total Decrease</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>
<b>Total Change</b>	<b>0</b>	<b>+\$25,269</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>+\$11,731</b>	<b>0</b>	<b>+\$11,731</b>



## DOL IT MODERNIZATION

<b>SUMMARY BUDGET AUTHORITY AND FTE BY ACTIVITY</b> (Dollars in Thousands)								
	<b>FY 2019 Enacted</b>		<b>FY 2020 Enacted</b>		<b>FY 2021 Request</b>		<b>Diff. FY21 Request / FY20 Enacted</b>	
	<b>FTE</b>	<b>Amount</b>	<b>FTE</b>	<b>Amount</b>	<b>FTE</b>	<b>Amount</b>	<b>FTE</b>	<b>Amount</b>
<b>Departmental Support Systems</b>	<b>0</b>	<b>4,889</b>	<b>0</b>	<b>4,889</b>	<b>0</b>	<b>4,889</b>	<b>0</b>	<b>0</b>
General Funds	0	4,889	0	4,889	0	4,889	0	0
<b>IT Infrastructure Modernization</b>	<b>0</b>	<b>18,380</b>	<b>0</b>	<b>20,380</b>	<b>0</b>	<b>32,111</b>	<b>0</b>	<b>11,731</b>
General Funds	0	18,380	0	20,380	0	32,111	0	11,731
<b>Total</b>	<b>0</b>	<b>23,269</b>	<b>0</b>	<b>25,269</b>	<b>0</b>	<b>37,000</b>	<b>0</b>	<b>11,731</b>
<b>General Funds</b>	<b>0</b>	<b>23,269</b>	<b>0</b>	<b>25,269</b>	<b>0</b>	<b>37,000</b>	<b>0</b>	<b>11,731</b>

NOTE: 2019 reflects actual FTE.

## DOL IT MODERNIZATION

<b>BUDGET AUTHORITY BY OBJECT CLASS</b>					
(Dollars in Thousands)					
		<b>FY 2019 Enacted</b>	<b>FY 2020 Enacted</b>	<b>FY 2021 Request</b>	<b>Diff. FY21 Request / FY20 Enacted</b>
	Full-Time Equivalent				
	<b>Total</b>	0	0	0	0
11.1	Full-time permanent	0	0	0	0
11.9	<b>Total personnel compensation</b>	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	7,585	13,170	5,585
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	20,404	14,819	20,965	6,146
31.0	Equipment	2,865	2,865	2,865	0
	<b>Total</b>	<b>23,269</b>	<b>25,269</b>	<b>37,000</b>	<b>11,731</b>
	1/Other goods and services from Federal sources				

## DOL IT MODERNIZATION

<b>APPROPRIATION HISTORY</b>					
(Dollars in Thousands)					
	<b>Budget Estimates to Congress</b>	<b>House Allowance</b>	<b>Senate Allowance</b>	<b>Appropriations</b>	<b>FTE</b>
2012					
Base Appropriation	\$25,000			\$19,814	0
2013					
Base Appropriation	\$21,852			\$18,778	0
2014					
Base Appropriation	\$20,587			\$19,778	0
2015					
Base Appropriation	\$30,578			\$15,394	0
2016					
Base Appropriation	\$119,602			\$29,778	0
2017					
Base Appropriation	\$63,162			\$18,778	0
2018					
Base Appropriation...1/	\$29,722	\$20,769		\$20,769	0
2019					
Base Appropriation...1/		\$29,169	\$20,769	\$23,269	0
2020					
Base Appropriation...2/	\$37,000	\$37,000	\$23,269	\$25,269	0
2021					
Base Appropriation	\$37,000				

<sup>1</sup> This bill was passed by the Senate. It was passed out of the House Subcommittee but was not reported out of the House Committee or by the full House.

<sup>2</sup> This bill was passed by the House. It was not taken up by the Senate Appropriations Subcommittee or full Appropriations Committee.

# DOL IT MODERNIZATION

## OVERVIEW

The Information Technology Modernization (ITM) appropriation is managed by the Office of the Chief Information Officer (OCIO). OCIO is dedicated to providing information technology (IT) leadership, products and support for DOL. OCIO plays a critical leadership role in driving reforms to help control system development efforts, better manage technology spending, and succeed in achieving real, measurable improvements in mission performance. The office provides guidance and support in Chief Information Officer (CIO) directives for capital planning, IT security, information management, and enterprise architecture.

The ITM appropriation provides resources for Department-wide investments, including the resources for IT security enhancement modernization efforts, accelerated adoption of cloud-based computing solutions, consolidation of infrastructure and networks, and the modernization of legacy IT systems and applications. The appropriation is one of the funding mechanisms used by the Department to fund IT: the Working Capital Fund (WCF) funds Department-wide IT operations; agencies fund the development and the operational costs for their specific applications; and the Departmental Management account provides policy development and oversight. In FY 2021, the Department proposes to establish an IT Working Capital Fund. All resources for IT in the WCF and in agency budgets would be realigned to the proposed IT WCF. This proposal is discussed further in the IT WCF budget.

ITM resources are critical to perform the OCIO's work in support of the IT strategic goals:

- Goal 1: Create the DOL IT Platform— Create a common environment for enterprise platform standards, processes, and governance.
- Goal 2: Modernize Legacy Agency Applications – Facilitate the modernization of legacy applications through the formation of business partnerships with mission agencies and the implementation of technical standards.
- Goal 3: Secure & Enhance the IT Infrastructure – Modernize and standardize DOL's infrastructure, and adopt an enterprise cloud platform.
- Goal 4: Transform the Customer Experience – Deliver best in class IT services and solutions to enable DOL to provide superior support to the American Public.

The FY 2021 ITM request totals \$37,000,000 to support these IT strategic goals. The strategic goals work in concert with the Department's Cloud Hosting First Initiative and is in alignment with the Administration's accelerated cloud adoption strategy. Initiatives discussed in the FY 2020 President's Budget will continue, including the DOL-wide rollout of Unified Communications to regional offices, the consolidation of logically separate networks/directories, and continued Identity and Access Management rollout.

This funding level will also support maintenance and enhancement of foundational capabilities established in FY 2019 and FY 2020 to accelerate DOL mission improvement and application modernization. Centers of Excellence (COE) that facilitate cloud migration, case management functionality, data analytics, and mobile application design are either in early stages of operation or design through FY 2020. DOL COEs will house centralized expertise and techniques for propagation across subsequent modernization efforts to continuously improve design and minimize development. Further, planned initiatives that have been held pending funding can be initiated; these include a centralized content management platform, virtual desktop infrastructure,

## **DOL IT MODERNIZATION**

enterprise data governance, implementation of 5G wireless technology, integrated IT operational platform and financial management capabilities, and centralized document intake and records management. DOL also plans to establish a centralized function to manage the 92,000+ individual communication services that need to transition to the new GSA Enterprise Infrastructure Services (EIS) contract. In order to meet the needs of this transition, DOL will need to establish a database and chargeback system to address the functions that GSA will no longer perform under the new EIS contract.



## DEPARTMENTAL SUPPORT SYSTEMS

<b>BUDGET AUTHORITY BEFORE THE COMMITTEE</b>				
(Dollars in Thousands)				
	<b>FY 2019 Enacted</b>	<b>FY 2020 Enacted</b>	<b>FY 2021 Request</b>	<b>Diff. FY21 Request / FY20 Enacted</b>
<b>Activity Appropriation</b>	<b>4,889</b>	<b>4,889</b>	<b>4,889</b>	<b>0</b>
FTE	0	0	0	0

### **Introduction**

The Departmental Support Systems (DSS) activity supports enterprise-wide information technology security enhancement initiatives. These initiatives facilitate a centrally managed IT environment with increased security parameters to protect the integrity of DOL data and network availability. OCIO achieves these efforts through several new and ongoing projects mandated by executive and congressional directives.

Activities funded in DSS include Identity and Access Management, Network Consolidation via Unified Communications, Continuous Diagnostics and Mitigation, Cybersecurity Executive Direction, and Enterprise Architecture Development. This budget activity supports the CAP Goal 1 (IT Modernization) sub-goal of reducing cybersecurity risks to the Federal mission.

### **Five-Year Budget Activity History**

<b><u>Fiscal Year</u></b>	<b><u>Funding</u></b> (Dollars in Thousands)	<b><u>FTE</u></b>
2016	\$4,898	0
2017	\$4,898	0
2018	\$4,889	0
2019	\$4,889	0
2020	\$4,889	0

### **FY 2021**

The FY 2021 request for DSS is \$4,889,000. Funding at this level will enable OCIO to maintain necessary enterprise-wide information technology security. FY 2021 initiatives will support the IT Strategic Goal 3 - Secure and Enhance the IT Infrastructure. Initiatives will include:

- *Identity and Access Management:* The Identity and Access Management (IAM) program ensures authorized DOL users have the appropriate access to technology resources at the right times and for the right reasons, seamlessly and securely. A common platform for IAM enables the application of uniform security policies across all DOL devices and operating platforms.
- *Continuous Diagnostics and Mitigation:* To strengthen DOL’s cybersecurity posture, OCIO’s Continuous Diagnostics and Mitigation (CDM) program is a dynamic approach to fortifying the security of DOL’s High Value Assets and providing DOL with capabilities and tools that identify, prioritize and mitigate cybersecurity risks on an ongoing basis. In FY 2021, OCIO will continue to implement additional capabilities in

## DEPARTMENTAL SUPPORT SYSTEMS

alignment with the Department of Homeland Security's (DHS) implementation schedule, which includes data integrity, data loss prevention, cloud, and mobile capability enhancements.

### **FY 2020**

The FY 2020 revised enacted funding for DSS is \$4,889,000. FY 2020 initiatives will include:

- *Information Security Systems Officer (ISSO)*: In FY 2020, the OCIO will establish a dedicated ISSO for all bureaus to improve planning for, and compliance with, security requirements at the bureau level. ISSO support will improve ATO planning and implementation and improve compliance with additional FISMA-related metrics.
- *Identity and Access Management*: In FY 2020, OCIO will continue to design and engineer key IAM capabilities OCIO will enable five agency applications with the DOL IAM Simplified Sign On solution to simultaneously improve the DOL security posture while easing the daily burden on the agency workforce.
- *Continuous Diagnostics and Mitigation*: In FY 2020, the OCIO will be implementing federal-wide risk algorithms, a Master User Record, and enhanced security correlation capabilities.

### **FY 2019**

The FY 2019 enacted funding for DSS was \$4,889,000. FY 2019 initiatives included:

- *Identity and Access Management*: Enabled Simplified Sign On (#NoPassword) for 22 user applications to date. Simplified perimeter security management and reduced instances requiring patching and monitoring by establishing a secure centralized service account password repository. Enabled remote access capability authenticating with Simplified Sign On via PIV Card. Decreased vulnerabilities with automatic disablement of departing user accounts – successfully disabled over 450 accounts to date.
- *Continuous Diagnostics and Mitigation*: Completed the enterprise-wide centralized risk monitoring capability by fully integrating BLS, Job Corps, and OIG into the DOL OCIO CDM Dashboard. Implemented updated set of DHS Continuous Diagnostics and Mitigation tools for vulnerability management and deployed DHS' Agency-Wide Adaptive Risk Enumeration (AWARE) algorithm providing DOL a standard operational risk assessment.



## DEPARTMENTAL SUPPORT SYSTEMS

<b>WORKLOAD AND PERFORMANCE SUMMARY</b>						
	<b>FY 2019 Enacted</b>		<b>FY 2020 Enacted</b>	<b>FY 2021 Request</b>		
	<b>Target</b>	<b>Result</b>	<b>Target</b>	<b>Target</b>		
<b>Departmental Support Systems</b>						
<b>Strategic Goal Management - Optimize the Department of Labor's Enterprise Services Opportunities</b>						
<b>Strategic Objective OASAM M.2 - Provide modern technology solutions that empower the DOL mission and serve the American public through collaboration and innovation.</b>						
OASAM-ITM-OCIO-01	Percent of desktops, laptops, and tablets in full compliance for BigFix patching		--	98.00%	98.50%	98.50%
OASAM-ITM-OCIO-02	Phishing Exercise: Number of repeat OASAM-managed “clickers”		--	--	0	0
OASAM-ITM-OCIO-03	Percent of OASAM-owned POA&Ms in a delayed status		--	--	50%	50%
OASAM-ITM-OCIO-04	Percentage of mobile devices compliant with current operating system version (iOS, Symbian, etc.)		100%	74%	100%	100%

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

## **DEPARTMENTAL SUPPORT SYSTEMS**

### **Workload Summary**

In support of CAP Goal 1, OCIO will focus on reducing the impact of cybersecurity risks by safeguarding IT systems, sensitive data, and networks. OCIO has created new measures in the cybersecurity area. OCIO will track the number of users who repeatedly fail Departmental phishing exercises with the goal of 0 repeat failures within three quarters in FY 2020 and FY 2021. OCIO will maintain a 98.5 percent compliance rate for BigFix patching and a 100 percent rate of mobile devices compliant with the current operating system version. Additionally, OCIO will target reducing the percent of Plans of Actions and Milestones (POA&MS) in a delayed status to 50 percent in FY 2020 and maintaining and driving that level down further in FY 2021.

## DEPARTMENTAL SUPPORT SYSTEMS

<b>BUDGET ACTIVITY BY OBJECT CLASS</b>					
(Dollars in Thousands)					
		<b>FY 2019 Enacted</b>	<b>FY 2020 Enacted</b>	<b>FY 2021 Request</b>	<b>Diff. FY21 Request / FY20 Enacted</b>
11.1	Full-time permanent	0	0	0	0
11.9	<b>Total personnel compensation</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
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	0	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	4,889	4,889	4,889	0
31.0	Equipment	0	0	0	0
	<b>Total</b>	<b>4,889</b>	<b>4,889</b>	<b>4,889</b>	<b>0</b>
	1/Other goods and services from Federal sources				

# DEPARTMENTAL SUPPORT SYSTEMS

## CHANGES IN FY 2021

(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
<b>Base</b>	<b>\$4,889</b>	<b>0</b>
<b>Program Increase</b>	<b>\$0</b>	<b>0</b>
<b>Program Decrease</b>	<b>\$0</b>	<b>0</b>



## IT INFRASTRUCTURE MODERNIZATION

<b>BUDGET AUTHORITY BEFORE THE COMMITTEE</b>				
(Dollars in Thousands)				
	<b>FY 2019 Enacted</b>	<b>FY 2020 Enacted</b>	<b>FY 2021 Request</b>	<b>Diff. FY21 Request / FY20 Enacted</b>
<b>Activity Appropriation</b>	<b>18,380</b>	<b>20,380</b>	<b>32,111</b>	<b>11,731</b>
FTE	0	0	0	0

### **Introduction**

IT Infrastructure Modernization (ITIM) has been used to fund initiatives which increase user productivity and allow DOL to provide better services, while also eliminating cost redundant infrastructures and creating a more reliable, secure, and consistent IT infrastructure across the Department. Initiatives support the consolidation of existing DOL agencies' infrastructure to gain economies of scale, eliminate duplication, and implement new capabilities. All of these benefits result in a more agile DOL workforce that is able to provide enhanced services and benefits for the American workforce. Efforts funded in this activity include the implementation of business process management and business intelligence capabilities on the enterprise-wide DOL IT platform, migration to cloud, and continued implementation of Unified Communications. This budget activity supports CAP Goal 1 (IT Modernization) and CAP Goal 2 (Data, Accountability, and Transparency).

### **Five-Year Budget Activity History**

<b><u>Fiscal Year</u></b>	<b><u>Funding</u></b> (Dollars in Thousands)	<b><u>FTE</u></b>
2016	\$24,880	0
2017	\$13,880	0
2018	\$15,880	0
2019	\$18,380	0
2020	\$20,380	0

### **FY 2021**

The FY 2021 request for ITIM is \$32,111,000, for an increase of \$11,731,000 above the FY 2020 revised enacted funding. The program funding is required in order to continue the buildout of the DOL cloud environment and IT platform capabilities. Many of DOL's critical mission systems built over the course of years to meet unique mission requirements have disparate system architectures that are unsuitable for cloud migration without significant redesign and reengineering. The program requires these funds to enable the timely transition and sequencing of legacy mission systems and applications for migration to the cloud and the DOL IT platform. The funding will also support the implementation of shared service provisioning capabilities and service consolidation to centralized provisioning platforms. The increased funding will also support the enterprise-wide implementation of the Technology Business Management (TBM) framework for improvements in IT cost visibility and management.

## IT INFRASTRUCTURE MODERNIZATION

DOL will realize IT modernization return on investment (ROI) in several aspects. DOL will gain increased productivity and faster processing times for DOL case adjudications through standardized business processes and automated workflows. This will result from the transition of DOL case management systems to the DOL IT platform that include a business process redesign. DOL will also realize quantifiable cost savings through operating the various mission and business case management systems within the centralized, cloud-based platform. Centralized hosting and management will simplify the physical IT infrastructure, improve visibility over case management performance, enable greater flexibility in staff and workload management, and provide common interfaces across all case management processes to reduce on-boarding and training/cross training time and resource costs.

The additional program funding will enable DOL to implement its IT modernization agenda and overall IT strategic plan, which will include the following initiatives, in-line with DOL IT goals and objectives:

- Goal 1 - Create the DOL IT Platform:
  - Continue developing a business intelligence capability on the DOL IT platform by enabling multiple agency use case on the platform. Associated benefits include improved data access and interoperability across bureau data, simplified data access for ad hoc report creation, improved evidence-based decision-making, improved search, and increased advanced analytics capabilities.
  - Integrate three additional case management systems with the business process management capability on the DOL IT platform. This will improve program integrity of enforcement agencies through modernized business process capabilities. Continue development of capabilities that can be leveraged to accelerate modernization of additional business processes and systems.
  - Digitize DOL's document-based resources and increase accessibility by integrating with the data analytics IT platform capability, with the ultimate potential cost avoidance of \$11.6 million per year due to increased efficiency in finding electronic records versus physical records. Advance DOL's approach and implementation of NARA-compliant records management processes.
  
- Goal 2- Modernize Legacy Agency Applications:
  - Utilize adoption of DOL IT platform capabilities, cloud hosting, and mobile platform as opportunity to modernize agency legacy applications.
  - Transform selected systems utilizing the business process management capability on the DOL IT platform.
  - Integrate DOL IT platform's data analytics capability with selected systems.
  - Continue on-going modernization and enhancement of the General Support and General Infrastructure assets.
  - Modernize 20-year-old, siloed WHD systems by building a multi-tier, cloud-based system using low-code business process management solutions to integrate all processes and workflows. The reengineered process and system will provide significant efficiency gains and operating cost savings.
  - Transition legacy ETA grants administration and management to cloud-hosted COTS solution in order to improve the performance of the grant award and management processes.

## IT INFRASTRUCTURE MODERNIZATION

- Modernize 20-year-old Electronic Labor Organization Reporting System (e.LORS) for the authoritative repository of labor union financial filings.
- Goal 3- Secure and Enhance the IT Infrastructure:
  - Leverage Enterprise Infrastructure Solution (EIS) to modernize remote office networks.
  - Automate Asset Management to provide a centralized inventory of IT infrastructure hardware and system software assets, through auto discovery capabilities, for complete visibility of all IT assets. This will garner significant advances in infrastructure security and management allowing the network to quarantine unrecognized hardware. An itemized hardware and configuration inventory accelerates identification of components, configurations, and locations which will require remediation when addressing security or operational issues.
  - Continue DOL website modernization to standardize front-end technology and simplify access to DOL services making them more user-friendly and easier to maintain.
  - Consolidate MSHA business and information systems to provide a secure and modernized infrastructure in alignment with DOL's target architecture.
  - Modernize OWCP's external facing customer portal (ECOMP) in order to improve functionality, reduce improper payments, and address security vulnerabilities.
- Goal 4 - Transform the Customer Experience:
  - Increase customer engagement and satisfaction by implementing a single portal for IT and non-IT services to centralize resource access and provide a single engagement point for customer service assistance and issue resolution.
  - Continue expansion of project management capabilities migrating all bureau-led projects to standardized DOL-wide project management framework to drive consistent project delivery and performance levels. Provide training to advance project management practices in support of DOL's IT modernization; agile methodologies, human-centered design, business process reengineering, etc.
  - Establish Virtual Desktop Infrastructure (VDI) Remote Access to centralize desktop provisioning from a secure cloud environment and enable a unified user desktop experience from any internet-connected device. The VDI provides increased user desktop control and monitoring capabilities, significantly reduces user cybersecurity risks, and reduces the distribution of DOL files, and information and data sets. The cloud-based architecture of VDI will also support DOL COOP efforts with continuous desktop access, and enable a possible Bring Your Own Device (BYOD) program.
  - Setup mobile applications COE to facilitate agency mobile application development by providing guidance and assistance in assessing agency applications, data sets, and web-enabled content for optimal mobile enablement.
  - Progress Unified Communications (UC) implementation and upgrade functionality at regional locations to improve the call experience and response time, and provide integrated telephone and video conferencing services from user desktops. DOL continues refining UC capabilities to drive down cost and



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- maintenance while expanding functionality and continue systematic UC implementation across DOL regional offices.
- Modernize DOL website platform and standardize content management platform to simplify site maintenance and ease access to DOL content and services.

DOL continues to make foundational progress and advance modernization efforts and has reached an operational state with key bureau modernization project plans. Yet, DOL does not have the resources to maintain a healthy modernization investment level. To tip the investment scale towards modernization there is a need for continued investment in delivery of new services to facilitate agency modernization momentum.

Without the requested resources in FY 2021, OCIO will need to extend initiative timelines by at least one year and in many cases multiple years. These delays will have significant downstream impacts on the budget, planning, and implementation efforts of several DOL Agencies working to modernize mission applications in the medium term. The disruption would delay citizen-impacting benefits prioritized by the Administration for programs affecting mine safety, visa processing, grants management, retirement benefits assurance, and impending oversight requirements for association health plans. Extending these timelines will significantly increase OCIO and agency costs, increase duplication of effort, lead to proliferation of point solutions, and increase the overall complexity of the IT landscape that DOL is working to simplify. In a worst-case scenario, the delay could even derail modernization plans altogether.

These resources work in concert with the request to establish an IT Working Capital Fund. The new fund will enable agencies to leverage OCIO's expertise and capacity to execute IT projects. However, additional resources are still required to provide the necessary modernization investment level.

### **FY 2020**

The FY 2020 revised enacted funding for ITIM is \$20,380,000. FY 2020 initiatives will include:

- Migration of applications to the Department's cloud.
- Continued transition of regional staff to UC-enabled telecommunication capabilities.
- Continued development and implementation of enterprise data management and data analytics capabilities on the DOL IT platform.
- Redesign and implementation of simplified processes to fulfill infrastructure service requests and maintenance.
- Development and implementation of a telecomm management platform to manage the post-EIS telecomm inventory and administration.
- Establishment of pilot programs to design and test new capabilities to drive mission-agency efficiency such as virtual desktop infrastructure, improved contact center capabilities, and a central content services platform.

### **FY 2019**

The FY 2019 enacted funding for ITIM is \$18,380,000. FY 2019 initiatives included:

- Initiated development of centralized CxO Dashboard reporting initiative providing senior

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management level data accessible to senior leaders across the Department.

- Configured a centralized Enterprise Development Common Operating Environment for the Department utilized by multiple bureaus including OWCP, OFCCP, OLMS, WHD, ETA, SOL, OSHA, EBSA, and MSHA.
- Continue to integrate agency applications with the business process management capability on the DOL IT platform.
- Migrate additional applications to the Department's cloud solution.
- Continue to implement UC capabilities at regional office locations.
- Continue to integrate agency data repositories with the DOL IT Platform analytics capability.

# IT INFRASTRUCTURE MODERNIZATION

## Workload Summary

In support of CAP Goal 1- IT Modernization, the Department conducted an assessment and selected the Appian Product Suite to develop a scalable business process management capability that is tailored to meet Agency needs. OCIO implemented this capability to enable the consolidation of DOL's disparate case management systems. The Department successfully on-boarded 5 agency applications to the platform with at least 5 planned for FY 2020 and DOL will continue to on-board more applications in FY 2021.

Also in support of CAP Goal 1, OCIO established DOL Cloud Services, a cross-Agency cloud solution for the Department of Labor. Consistent with the Federal Cloud Computing Strategy, the solution gives DOL agencies access to Cloud Service Providers (CSPs) with the ability to leverage a central Authority to Operate (ATO) between DOL data centers, CSPs, and DOL agencies. To date, OCIO has deployed 15 production applications and a development environment into the Department cloud. In FY 2020 and FY 2021, OCIO plans to continue migrating additional applications to the Department cloud.

Finally, in support of CAP Goal 1, OCIO launched its Unified Communications (UC) program to integrate and modernize the Department network. With tools like video-teleconferencing (VTC), wireless Internet (Wi-Fi), and Voice over Internet Protocol (VoIP) phones with Cisco Jabber soft phone capabilities, the Department staff can now make secure calls from anywhere on any device, host interactive meetings regardless of location, and collaborate in new ways. The UC program consolidates nine legacy network infrastructures into one modern network. The new UC network better prevents the Department from cyberattacks by upgrading network equipment (e.g. switches, routers), providing enterprise network monitoring tools, and enabling authentication technology, as well as adding network redundancies to protect the infrastructure in the event of an unplanned outage. By the end of FY 2020, staff at 90 sites and the Frances Perkins Building, which constitute 70 percent of DOL workforce, will leverage UC capabilities. Transition to UC infrastructure for core regional sites is planned to be completed in FY 2021. DOL is investigating the potential of 5G wireless technology to eliminate the need to re-wire the 200+ smaller sites.

In support of CAP Goal 2 – Data Accountability Transparency, DOL will improve the use of data for decision-making and accountability by implementing enterprise data management and data analytics capabilities on the DOL IT platform. These capabilities will ease integration of data from across organizational silos, provide users with tools to develop custom reports and visualizations, and provide self-service analytics to drive evidence-based mission management and decision-making across Program boundaries where allowable. In FY 2020 and FY 2021, the OCIO will continue to integrate agency data repositories with the DOL central repository and establish the data analytics capability for more agency applications. Pilot data analytics capabilities were developed in FY 2019 and are being utilized by ETA and OASP with additional agencies discussion plans for adoption.

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<b>BUDGET ACTIVITY BY OBJECT CLASS</b>					
(Dollars in Thousands)					
		<b>FY 2019 Enacted</b>	<b>FY 2020 Enacted</b>	<b>FY 2021 Request</b>	<b>Diff. FY21 Request / FY20 Enacted</b>
11.1	Full-time permanent	0	0	0	0
11.9	<b>Total personnel compensation</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
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	7,585	13,170	5,585
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	15,515	9,930	16,076	6,146
31.0	Equipment	2,865	2,865	2,865	0
	<b>Total</b>	<b>18,380</b>	<b>20,380</b>	<b>32,111</b>	<b>11,731</b>
	1/Other goods and services from Federal sources				

# IT INFRASTRUCTURE MODERNIZATION

## CHANGES IN FY 2021

(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** **\$11,731**

**Direct FTE** **0**

	Estimate	FTE
<b>Base</b>	<b>\$20,380</b>	<b>0</b>
<b>Program Increase</b>	<b>\$11,731</b>	<b>0</b>
<b>Program Decrease</b>	<b>\$0</b>	<b>0</b>