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Description of document: Department of Education (ED) Five Year Information Technology (IT) Modernization Roadmap, 2018

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UNITED STATES DEPARTMENT OF EDUCATION

OFFICE OF THE SECRETARY

FOIA Service Center

December 30, 2020

RE: FOIA Request No. 21-00332-F

This letter is an interim response to your request for information pursuant to the Freedom of Information Act (FOIA), 5 U.S.C. § 552, dated November 16, 2020 and received in this office on November 17, 2020. Your request was forwarded to the following office to search for documents that may be responsive to your request: Office of the Secretary (OS), Office of the Chief Information Officer (OCIO) and Federal Student Aid (FSA).

You requested: A copy of the most recent Information Technology Modernization Plan at the Dept of Education; and a copy of the most recent plan to modernize the oldest Legacy Information Technology system that is nearly 5 decades old.

Staff from OS informed this office (FSC) that after a search of their files, they were unable to locate any documents that were responsive to your request.

This response concern OCIO. Available for Public Access Link (PAL) download are 44 pages of documents responsive to your request. The documents provided are:

➤ OCIO IT Mod-21-00332-F

You can access your PAL account or register for a PAL account at this link:

<https://foiexpress.pal.ed.gov/app/PalLogin.aspx>

However, certain information has been withheld according to FOIA exemption (b)(5), specified below:

- Records or portions of records relating to certain intra-agency information is exempt from disclosure pursuant to 5 U.S.C. § 552(b)(5) of the FOIA. This exemption permits the withholding of inter- or intra-agency information that could be withheld under civil discovery, including information subject to the deliberative process, attorney-client, or attorney-work product privileges.

At this time, the Department is continuing to process your request and your FOIA request case file remains open. It will not close until the Department provides you with a response regarding outstanding responsive documents. Our final release letter will contain information related to your appeal rights of agency decisions.

If you have any questions, please contact the FOIA Service Center at (202) 401-8365, or you may send an e-mail to EDFOIAManager@ed.gov.

Sincerely,

Sandra Lewandowski

Sandra Lewandowski
Government Information Specialist
Office of the Executive Secretariat

Enclosure

U.S. DEPARTMENT OF EDUCATION

Office of the Chief Information Officer 5-Year IT Modernization Strategic Roadmap Final Report

October 31, 2018

Presented by:

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Revision History

Version	Date	Author	Revision History
.01	6/7/18	IT Cadre	<ul style="list-style-type: none">• Initial Draft
.02	10/31/18	LaTina Brinson	<ul style="list-style-type: none">• Added Document Revisions

Executive Summary

After completing Phase I (Current State Visualization Diagram), Phase II (IT Services Assessment), and Phase III (Future State Visualization Diagram), IT Cadre is delivering Phase IV (5-Year IT Modernization Strategic Roadmap) to the US Department of Education (ED) Office of the Chief Information Officer (OCIO) using Visualization Engineering® as the foundational approach. The timeline to achieve the shared vision of the future IT and operational environments is within five years from the start of the modernization effort. OCIO and FSA CIO have agreed to a start date of July 1st, 2018 based on the completion of the VDC to NGDC migration and the anticipated PIVOT-H protest end date of June 20th.

The purpose of this 5-Year IT Modernization Strategic Roadmap is to visualize the major projects and dependencies that enable ED to transform from the Current State (As-Is) operational and IT environment to the Future State (To-Be) 5-Year Vision. Note: ED IT Services not impacted by the modernization program (i.e. not a project) are not depicted on this Roadmap but are shown on the Future State Diagram.

The current plan anticipates all consolidation and modernization objectives being achieved by the end of FY22. This includes the consolidation of the two primary hosting areas, PIVOT-H and NGDC, to the single primary ED Consolidated Hosting Area (EDCHA). IT Cadre facilitated a meeting between ED OCIO and FSA CIO on May 3rd that resulted in the shared agreement to a single consolidated hosting area. Therefore, the Department will begin to realize an operational savings for the new IT environment in FY23.

IT Cadre has prepared an aggressive but achievable Strategic Roadmap based on feedback from stakeholders (segment and system owners), as well as taking into account dependencies between IT Services and projects. Executing the migrations and projects according to this timeline will happen with a shared commitment across Department. This must be established at the Secretary level and communicated through Assistant Secretary (Principal Office Component) as well as CIO leadership. OCIO must establish an Enterprise Program Management Office (EPMO) that serves as the “conductor” for all the projects and has direct contact with each individual project leader. It is essential that the EPMO be properly resourced to ensure the overall success of this 5-year modernization effort. John Faircloth is the proposed EPMO lead.

The 5-Year IT Modernization Strategic Roadmap is based on nine key assumptions.

1. PIVOT-N/I/M/P Network and Core Services will be fully operationally capable (FOC) within 3 months.
2. All ED IT Services currently hosted in EDUCATE will be migrated to PIVOT-H by December 31, 2018.
3. PIVOT-H and NGDC will consolidate into the ED Consolidated Hosting Area (EDCHA) by the end of FY22.
4. ED will consolidate to a single Financial Management System for its core financial and general ledger services under the USSM Program (anticipated to be available in July 2021.)
5. The Grants Management System (“G6”) will be de-coupled from EDCAPS and hosted in PIVOT-H/EDCHA.
6. The Enterprise Data Warehouse will be an ongoing project that will build capability based on demonstrated success over the modernization timeline.
7. The FSA 64 Loan Servicers, Guaranty Agencies and Private Collection Agencies will be consolidated to a reduced set under the NextGen Financial Services Environment by the end of FY20.

8. In the event of department reorganization or IT investment segment re-alignment, the department mission and systems being used will stay the same, although the IT service owner may change.

9. A migration of a legacy IT service into an ED hosting area can be accomplished in one to three months.

Each migration and modernization project can be mapped to achieving one or more of the CIO's IT Modernization Objectives listed below:

I. Consolidate ED IT Cloud Services.

Increase the number of IT services in a centralized cloud hosting facility as well as reduce the number of cloud service providers.

Benefits: Fewer contracts, fewer PMs, more effective governance, increased mission-oriented use of IT resources (improved cost efficiency).

II. Reduce Cybersecurity Risk.

Reduce the number of IT services, especially those that have external websites, and reduce the number of IT services containing sensitive data.

Benefits: Improved cybersecurity by reducing the attack surface, less Personally Identifiable Information (PII) exposure, external collaboration services and information dissemination platforms hosted in more secure environments (i.e., accredited to host federal data and systems).

III. Modernize to Increase Business Value/Technical Business Management (TBM).

Increase the use of shared services and automate as many manual processes as possible.

Benefits: Services in the IT environment provide more value to the Department.

Each migration and modernization project on the roadmap have a proposed time window, investment segment assignment, project service type assignment (Core Mission Service, Enterprise Service, and Business Service), sub-tasks (e.g., research, development, data migration, building interfaces, testing, release), consolidations of capabilities, proposed project leader, and indications of whether the project is in a special category that creates high visibility. These special categories include High Value Asset (HVA), Personally Identifiable Information (PII), and a high dollar IT investment (i.e., part of ED's top 21 IT investments reported to OMB). Each project results in a new capability release that often enables the sunset of legacy IT Services. Individual project descriptions are provided in Section 3.0 – IT Modernization Project Descriptions.

There are a total of 25 IT modernization projects and either 77 or 115 IT Service migrations (depending on whether EDCHA is PIVOT-H or NGDC, respectively) on the Roadmap. The IT modernization projects are broken down into 4 Business Service projects, 14 Core Mission Service projects, and 7 Enterprise Service projects. Migrations are broken down into 51 IT Services from EDUCATE to PIVOT-H, 17 External Commercial hosted IT Services to PIVOT-H, and either 9 IT Services from NGDC to EDCHA or 47 IT Services from PIVOT-H to EDCHA. There are nine projects identified as major due to scope and resourcing required. The nine Major IT Projects, with proposed project leaders, are:

1. Website Consolidation [C. Hammersmith]
2. Grants Management "G6" [T. Erdelyi]

3. PIVOT EDCAPS [C. Shanefelter]
4. USSM EDCAPS [C. Shanefelter]
5. O365 SharePoint [J. Woodard, J. Morgan, S. Heister]
6. Enterprise Data Warehouse [H. Cronin, A. Hill]
7. EDSTAR [L. Flowe]
8. EDUCATE to PIVOT Migration [J. Morgan]
9. PIVOT/NGDC to EDCHA Migration (A. Hill, K. Kimball)

The recommended next steps for the ED OCIO are:

- Executive Communications Support, 60 days. This is a series of focused diagrams to facilitate meetings between the Department CIO and senior leaders in Principal Office Components (POCs) and Support Offices. These products will be tailored to the CIO “marketing campaign” to gain commitment across the Department to the transition plan (Strategic Roadmap). They can represent the ED enterprise as well as individuals POCs. IT Cadre will be prepared to present these products to the stakeholder leaders at these meetings.
- Detailed Cost Range Analysis, 60 days. This is a comprehensive scenario-based decision support tool offered by IT Cadre that facilitates “what-if” analysis and can feed a Government Cost Estimate (GCE).
- Visual Program Assurance, 6 month base with 6 month follow-on option. IT Cadre will provide support to senior executives and key stakeholders to ensure IT Modernization projects remain on track to meet objectives. This includes periodic updates to the Strategic Roadmap as project timelines and/or Department priorities change. This support will provide leaders with an innovative way to see progress and potential obstacles throughout the organization’s transformation. Visual reviews with stakeholders will assess the accuracy, quality, and progress of the transition and communicate to leaders the actions needed to keep on track.
- Website Consolidation Visualization Support, 6 months. IT Cadre will provide support to OCIO IT Program Management Directorate to gain a shared understanding of the current state of websites throughout the Department, establish a shared agreement to the future state, and arrive at a shared commitment to the roadmap that lays out the details in a series of sub-tasks and timeline to the Department’s web consolidation project.

1.0 – Introduction

Very few cabinet-level departments within the federal government have visibility into the details of how mission and operational functions across the enterprise are performed, especially when those missions are accomplished using IT systems. This is particularly true at large and complex organizations such as the Department of Education (ED). ED is comprised of Principal Office Components (POCs) and support offices that are each narrowly focused on accomplishing their part of the Department's mission to "promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access." (Source: <https://www2.ed.gov/about/overview/mission/mission.html>)

At ED, insight is needed into investments, contracts, systems, applications and how they tie back to the POCs and support offices. With 284 IT Services (246 of which ED owns) documented in the Current State Visualization Diagram and IT Services Assessment, the OCIO is faced with challenging modernization decisions. At the same time, Congress and multiple Presidential Administrations have spent over two decades demanding a much more holistic and integrated enterprise management approach with the Department Chief Information Officer (CIO) playing a critical coordinating role across the enterprise. This was reinforced in December 2014 with the Federal Information Technology Acquisition Reform Act (FITARA). Now, more than ever, it is expected that cabinet-level departments such as ED realize efficiencies and economies of scale with a particular emphasis on performing traditional enterprise functions such as finance, budget, human capital management, acquisition, and information resource management. The new authorities under FITARA require an unprecedented amount of enterprise-level coordination and collaboration between the CIO and the operating offices of the Department.

The ED OCIO is charged with addressing this challenge and is seeking to develop a complete enterprise level picture to assist the Department in executing its statutory obligations outlined in the Federal Information Security Management Act (FISMA) and FITARA. Such a view will better inform Department-wide planning, investment, consolidation, legacy replacement, and other functions and systems that may impact mission or operations. The transformation required to achieve ED's enterprise goals will be most successful with an in-depth understanding of operations and IT Services at all levels of the organization.

Successful organizational transformation efforts start with all participants seeing and understanding the current state, agreeing to the same end state, and then following a common roadmap that operationalizes an executable strategy for achieving the desired outcomes. While development of a long-term vision for an organization can seem fairly straightforward, execution often becomes very difficult due to the wide range of stakeholder interests and competing organizational demands. IT Cadre understands these challenges and uses Visualization Engineering® support services to help leaders set the conditions for organizational transformation initiatives. This analysis will enable ED to:

- Gain a shared understanding of its current operational environments
- Depict alignment to the strategic goals of the OCIO
- Provide insight into opportunities for modernization investments at the Department level
- Gain a shared agreement across the Department for the 5-year vision
- Achieve a shared commitment to the 5-Year IT Modernization Strategic Roadmap
- Provide a communication tool to support leadership and stakeholder discussions

1.1 - A Guide to This Document

This supplemental report on Phase IV (Strategic Roadmap) is a direct follow-on to Phases I (Current State), II (IT Services Assessment), and III (Future State 5-Year Vision). The primary deliverable is the visualization diagram of the 5-Year IT Modernization Strategic Roadmap. This report augments the diagram and discusses the IT migrations and modernization projects in greater detail. It is organized into four sections. Section 2 describes the approach that was taken in executing this project and developing its deliverables. Section 3 captures the migration and IT modernization project descriptions. Section 4 discusses the recommended next steps for the department to successfully communicate and execute the migrations and projects in the Strategic Roadmap, as well as determine a more detailed cost range estimate the Department. The Appendices contain supporting documents for the Strategic Roadmap; including a detailed spreadsheet of the individual projects (see Appendix A).

2.0 – Approach

This section describes the overall approach used to develop the ED Strategic Roadmap visualization diagram and the associated documents.

2.1 – Scope and Stakeholders

The scope of this phase of the project was defined to be a 5-Year IT Modernization Strategic Roadmap. The purpose of this IT Modernization Strategic Roadmap is to visualize the major projects and dependencies that enable the Department to transform from the Current State (As-Is) operational and IT environment to the Future State (To-Be) 5-Year Vision. Note: ED IT Services not impacted by the modernization program (i.e. not a project) are not depicted on this Roadmap but are shown on the Future State Diagram. In this phase, stakeholder meetings focused on IT Investment Segment owners and members to align with IT Segment Modernization Planning efforts. We also met with many of the recommended project leads annotated on the Roadmap to communicate the plan. The alignment of the phases of this visualization engineering project with the Department's Segment Modernization Planning can be seen in the figure on the next page.

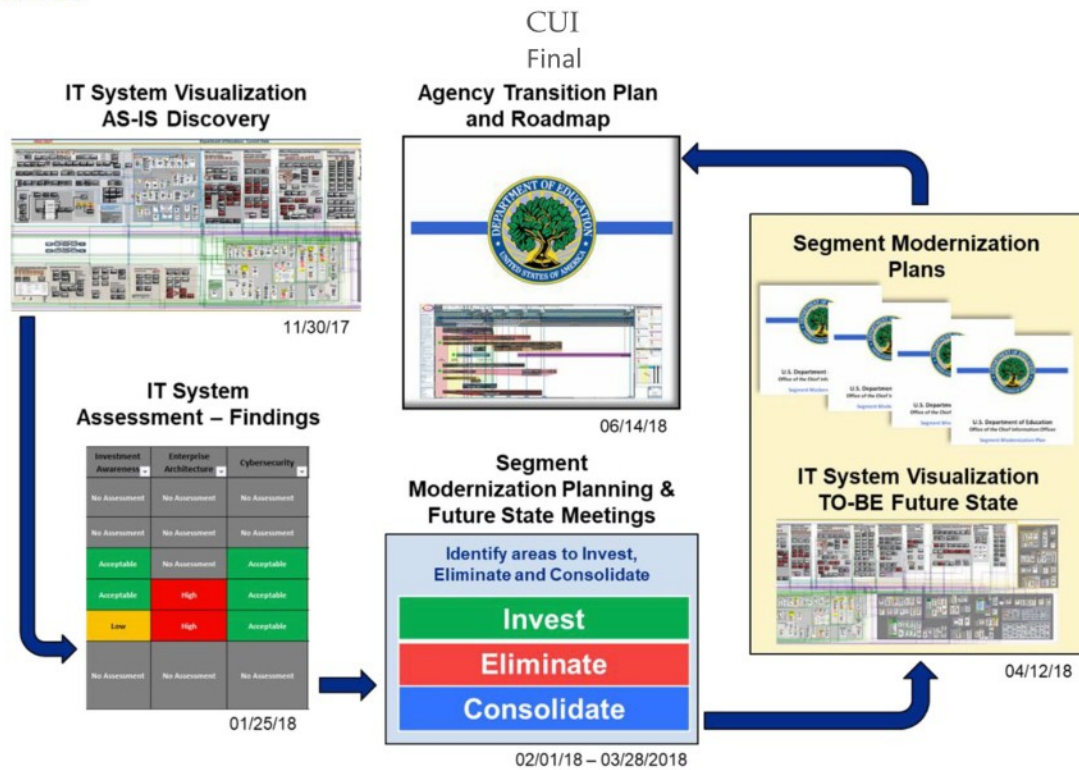


Figure 1: Sequence of steps to align IT Cadre visualization engineering and assessment projects with IT Investment Segment modernization planning.

Face-to face meetings with stakeholders (segment owners, system owners, and proposed project leads) occurred at ED locations in Washington, DC throughout the 60 days. We facilitated 24 iterative meetings with IT Investment Segment owners and members; System Owners, Principal Office Component (POC) and support office representatives, as well as weekly update meetings with OCIO (see Appendix C – Key Stakeholder and Meeting Master List). IT Cadre conducted both initial and follow-up meetings with stakeholders to review the diagram and gain shared commitment to the 5-Year IT Modernization Strategic Roadmap (i.e., transition plan). Several stakeholders received follow-up meetings. One of the early meetings with FSA established a new shared agreement to a single COA for the future state that included migrating to an ED Consolidated Hosting Area (EDCHA) in years 3-5 of the transition plan. EDCHA will consolidate the IT Services remaining in PIVOT and NGDC beginning in Year 3 (July 2021).

Each meeting with the stakeholders served a multitude of objectives including:

- Validating the feasibility of the proposed Roadmap.
- Sharing the latest version of the diagram.
- Collecting new and additional information to improve the accuracy and timing of the projects and migrations.
- Identifying necessary information to be collected through other means.
- Identifying areas in need of process and/or operational improvements.

2.2 – Initial Version of the 5-Year IT Modernization Strategic Roadmap

In order to quantify the level of effort required for each IT migration and modernization project, IT Cadre used a “t-shirt size” approach to classifying projects. For example, a small required up to 3 months, a medium up to 6 months, a large up to 12 months, an extra-large up to 2 years, and an extra extra-large up to 3 years.

Within 15 days of the Strategic Roadmap kickoff meeting, IT Cadre presented a draft to the ED OCIO leadership team and an agreement was reached on the overall layout of the diagram. The 15-Day visualization diagram was based on the following revised assumptions:

1. PIVOT-N/I/M/P Network and Core Services will be fully operationally capable (FOC) within 3 months.
2. All ED IT Services currently hosted in EDUCATE will be migrated to PIVOT-H by December 31, 2018.
3. PIVOT-H and NGDC will consolidate into the ED Consolidated Hosting Area (EDCHA) by the end of FY22.
4. ED will consolidate to a single Financial Management System for its core financial and general ledger services under the USSM Program (anticipated to be available in July 2021.)
5. The Grants Management System (“G6”) will be de-coupled from EDCAPS and hosted in PIVOT-H/EDCHA.
6. The Enterprise Data Warehouse will be an ongoing project that will build capability based on demonstrated success over the modernization timeline.
7. The FSA 64 Loan Servicers, Guaranty Agencies and Private Collection Agencies will be consolidated to a reduced set under the NextGen Financial Services Environment by the end of FY20.
8. In the event of department reorganization or IT investment segment re-alignment, the department mission and systems being used will stay the same, although the IT service owner may change.
9. A migration of a legacy IT service into an ED hosting area can be accomplished in one to three months.

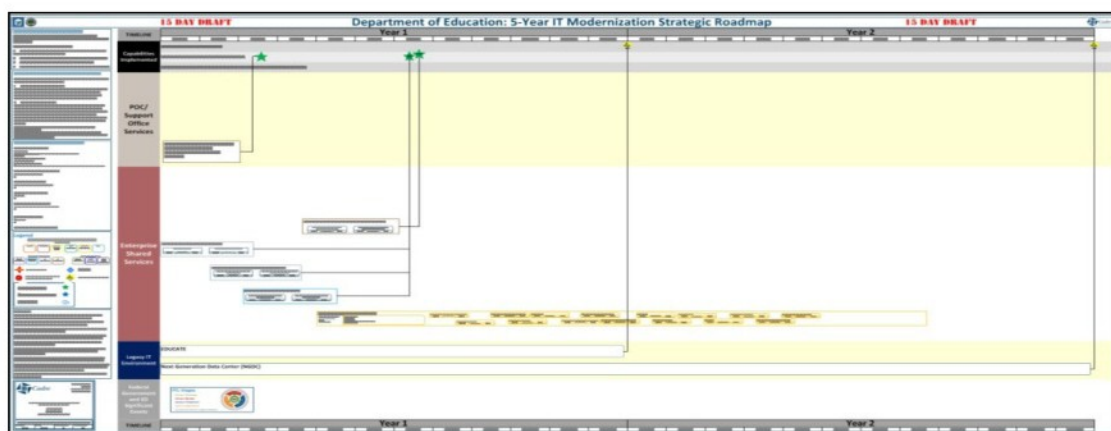


Figure 2: 15-Day Future State – 5 Year Vision Diagram

IT Cadre delivered the 15-Day version of the visualization on 26 April 2018. This initial version is designed to be a starting point and azimuth check with Department Education. Out of this meeting, IT Cadre received comments and feedback to help guide the way forward – exactly the purpose of this meeting.

Each of the IT migrations and modernization projects mapped to one or more of the three CIO IT Modernization Objectives as indicated below:

I. Consolidate ED IT Cloud Services.

Increase the number of IT services in a centralized cloud hosting facility as well as reduce the number of cloud service providers.

Benefits: Fewer contracts, fewer PMs, more effective governance, increased mission-oriented use of IT resources (improved cost efficiency).

II. Reduce Cybersecurity Risk.

Reduce the number of IT services, especially those that have external websites, and reduce the number of IT services containing sensitive data.

Benefits: Improved cybersecurity by reducing the attack surface, reduced Personally Identifiable Information (PII) exposure, external collaboration services and information dissemination platforms hosted in more secure environments (i.e., accredited to host federal data and systems).

III. Modernize to Increase Business Value/Technical Business Management (TBM).

Increase the use of shared services and automate as many manual processes as possible.

Benefits: Services in the IT environment provide more value to the Department.

2.3 – Resulting 5-Year IT Modernization Strategic Roadmap (Final Draft)

Over the course of 24 meetings with investment segment owners, system owners, and proposed IT modernization project managers, the scope and timing of each of the migrations and projects were validated and/or adjusted. Assumptions were also validated or updated.

Shown below is the final draft of the 5-Year IT Modernization Strategic Roadmap.

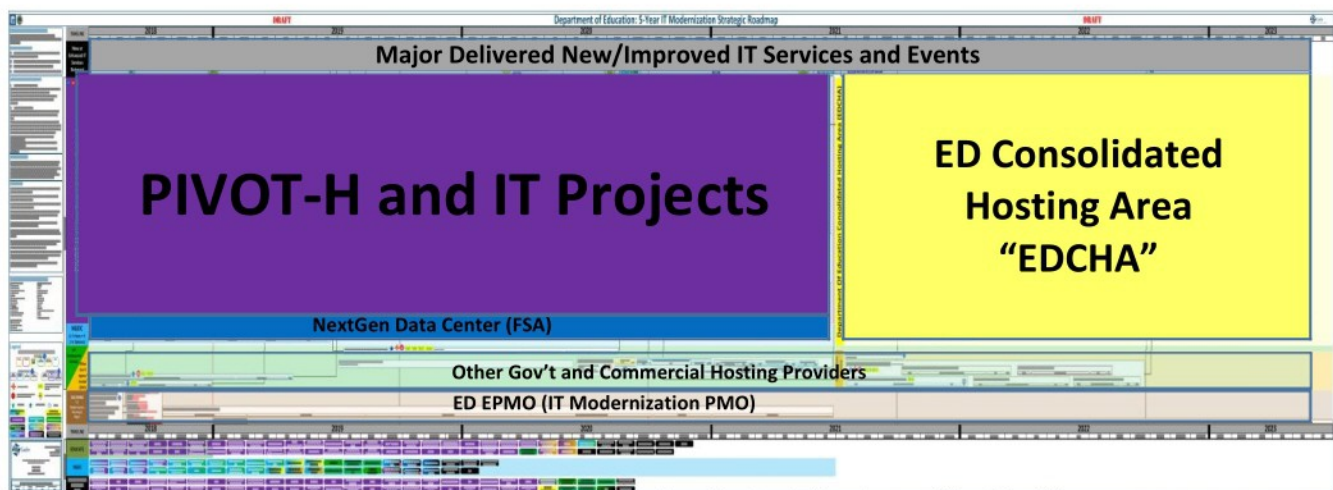


Figure 3: 5-Year IT Modernization Strategic Roadmap (Final Draft)

The proposed 5-Year Roadmap is arranged as follows:

- i. Across the top are the years starting July 2019 and continuing into 2023
- ii. The grey section contains significant events and new delivered IT Services
- iii. The purple section outlines the events/projects proposed for ED's PIVOT-H hosting environment
- iv. The green section outlines the events/projects proposed for those IT Services hosted outside of ED
- v. The light blue section outlines events proposed for ED's FSA NextGen Data Center (NGDC)
- vi. The brown section is for the IT Modernization Enterprise Program Management Office (EPMO)
- vii. The yellow section represents the proposed Department of Education's Consolidated Hosting Area (EDCHA) – the plan to consolidate PIVOT-H and NGDC into a single hosting area

3.0 – IT Modernization Projects and IT Service Migrations

There are a total of 25 IT modernization projects and either 77 or 115 IT Service migrations (depending on whether EDCHA is PIVOT-H or NGDC, respectively) on the Roadmap. The IT modernization projects are broken down into 4 Business Service projects, 14 Core Mission Service projects, and 7 Enterprise Service projects. Migrations are broken down into 51 IT Services from EDUCATE to PIVOT-H, 17 External Commercial hosted IT Services to PIVOT-H, and either 9 IT Services from NGDC to EDCHA or 47 IT Services from PIVOT-H to EDCHA.

Each migration and modernization project on the roadmap has a proposed time window, investment segment assignment, project service type assignment (Core Mission Service, Enterprise Service, and Business Service), sub-tasks (e.g., research, development, building interfaces, data migration, testing, release), consolidations of capabilities, proposed project leader, and indications of whether the project is in a special category that creates high visibility. These special categories include High Value Asset (HVA), Personally Identifiable Information (PII), and a high dollar IT investment (i.e., part of ED's top 21 IT investments reported to OMB). Each project results in a new capability release that often enables the sunset of legacy IT Services. All recommended projects should have a PM conduct a comprehensive business case analysis to determine the best course of action to pursue. When considering enhancements to a service or consolidation to include the capabilities of other systems, the PM should first explore options with the PIVOT hosting vendor/integrator for possible economically feasible solutions.

3.1 – Project and Migration Descriptions

3.1.1 – Website Consolidation (into ED.gov)

Description: ED has approximately 700 websites (including development and test environments) using several content management systems. The overarching objective is to have most ED websites hosted via ED.gov. ED.gov is both a high value asset (HVA) and contains personally identifiable information (PII).

Recommended Project Lead: C. Hammersmith

IT Investment Segment: Information Dissemination

Recommended Start Date: January 2019

Predicted Duration: Up to 2 years



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Other IT Services (their capabilities) integrated into this IT Service: IT Cadre identified the following websites to transition to ED.gov – but C. Hammersmith is tracking about 700 websites (includes test and development environments) both inside and outside of the ED.gov domain and on at least three different content management systems: ED.gov Legacy system, ED.gov, Magnet School Assistance Program (MSAP), Teaching Incentive Fund (TIF) Annual Performance, NRS Web, You for Youth Portal, National Assessment Governing Board (NAGB), Promise Neighborhood, Results, Perkins Collaborative Resource Network (PCRN), ED.Pubs.gov, Readiness and Emergency Management for Schools, IDEA Analysis Communication, Dissemination, Meetings, Information for Financial Aid Professionals (IFAP), Financial Partners Portal, FSA Information for Counselors Toolkit, Integrated Student Experience (ISE), National Charter Schools Resource Center, Online Complaints Forms and Backend Database, Asia Pacific Economic Cooperative (APEC)

Pre-requisites: Consolidate to a single website content management system (CMS).

3.1.2 – EA Toolkit

Description: ED's Enterprise Architecture tool of choice is Software AG's Alfabet Solution. The 'Alfabet Solution' is a commercial-off-the-shelf (COTS) IT Planning & IT Portfolio Management platform that will satisfy the Department of Education's requirements and support informed investment decision-making within the Office of the Chief Information Officer (OCIO). Its collaborative platform will provide OCIO and the Federal Student Aid Office a view of the current IT landscape and plan for the future. Alfabet will allow ED to capture the static output of the IT Systems Visualization project into an automated tool that is dynamic, extensible and reportable.

Recommended Project Lead: Steven-Corey-Bey

Recommended Start Date: TBD

Predicted Duration: TBD

Other IT Services (their capabilities) integrated into this IT Service: Strategic Planning, Business IT Relationship Management, IT Planning and Enterprise Architecture Management

Pre-requisites: n/a

3.1.3 – Establishing the Enterprise Program Management Office (EPMO)

Description: An aggressive but achievable Strategic Roadmap has been developed based on feedback from stakeholders (segment and system owners), as well as taking into account dependencies between IT Services and projects. Executing the migrations and projects according to this timeline will happen with a shared commitment across the Department. This must be established at the Secretary level and communicated through Assistant Secretary (Principal Office Component) as well as CIO leadership. OCIO must establish an Enterprise Program Management Office (EPMO) that serves as the "conductor" for all the projects and has direct contact with each individual project leader. It is essential that the EPMO be properly resourced to ensure the overall success of this 5-year modernization effort. John Faircloth is the proposed EPMO lead.

Recommended Project Lead: John Faircloth

Recommended Start Date: TBD



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Predicted Duration: TBD

Other IT Services (their capabilities) integrated into this IT Service: Strategic Planning, Business IT Relationship Management, IT Planning and Enterprise Architecture Management

Pre-requisites: n/a

3.1.4 – Grants Management “G6”

Description: The “G6” IT modernization project is a modernized version of the current G5 IT Service. Over time, many IT Services were created in ED to process and handle functionality that was not being provided by G5. These other Grants Support Systems were initially developed to answer to a new mandate/rule and either the current G5 was not able to accommodate or could not accommodate in a timely manner. The goal of this project is to either build onto the existing G5 to absorb the functionality of these other IT Services or invest in a new solution. This will be determined by a business case analysis. In addition to the creation of an improved G5 (i.e., “G6”), there will need to be a process in place to periodically address the concerns and needs of the customers to prevent another migration away from this new system.

Recommended Project Lead: T. Erdelyi

IT Investment Segment: Grants

Recommended Start Date: January 2020

Predicted Duration: 18 months

Other IT Services (their capabilities) integrated into this IT Service: Legacy G5, EASIE, TRIO Programs Competition Database, National Center on Safe Supportive Learning Environments, Endowment Financial Reports System (EFRS), FIPSE Discretionary Grant Database, GEARUP, GAANN, International Resource Information System (IRIS), Teacher Quality Enhancement Title II Scholarship and Administrative Reporting System, Title III/V/VII Annual Performance Reporting System, Title III/V/VII Grant Eligibility Application, TRIO Annual Performance, Teacher Shortage Area Collection (TSAC), and SPP/APR Module and Customer Service Database.

Pre-requisites: n/a

3.1.5 – PIVOT EDCAPS

Description: The Department of Education Central Automated Processing System (EDCAPS) is designed to improve financial management through a set of integrated financial systems to support the ED’s core management information functions. Before this project can start, the upgrade to R12 and migration from EDUCATE to PIVOT-H must be complete. This project involves modernizing (virtualizing) the financial software running on Oracle R12, and decoupling G5 from the Oracle EDCAPS systems. The longer term goal is to eventually move the general ledger, acquisition/contracting system, financial audit, and ITSM into the USSM shared service program in FY2022 – if such a federal level financial management shared service is available.

Recommended Project Lead: C. Shanefelter



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IT Investment Segment: Financial Management

Recommended Start Date: January 2020 (sooner if feasible)

Predicted Duration: 9 months

Other IT Services (their capabilities) integrated into this IT Service: The enhanced PIVOT EDCAPS will have the capabilities of the existing Financial Management Support System (FMSS), Contracts and Purchasing Support System (CPSS), Hyperion, Sunflower Asset Management, and the reporting capability of Cognos.

Pre-requisites: PIVOT-H environment established and able to accept migrations from EDUCATE, EDCAPS completes its upgrade to R12, then the EDCAPS systems migrate from EDUCATE to PIVOT-H.

3.1.6 – USSM EDCAPS

Description: The GSA Unified Share Services Management (USSM) program is an initiative for the Federal government to have many common government-needed shared services available for other government agencies. If the Federal Government has a USSM offering for financial management systems available at some time in the future, ED would plan to move its core financial services to this shared platform. Since it is not yet defined on the capabilities of this core service, it is difficult to determine which services can be shifted to USSM and what others need to remain for either pre- or post-processing. If there is no USSM Financial Service available, then EDCAPS would remain in PIVOT-H.

Recommended Project Lead: C. Shanefelter

IT Investment Segment: Financial Management

Recommended Start Date: Summer 2021

Predicted Duration: Up to 14 months

Other IT Services (their capabilities) integrated into this IT Service: the capabilities of the PIVOT EDCAPS (a general ledger system – that can handle both FMSS and FSA FMS, Core Acquisition (CPSS), Financial Transaction Audit and Tracking, and a Financial Management ITSM System.

Pre-requisites: The USSM Financial Management Shared Service exists, meets the requirements for ED (including processing millions of loans transactions per day), and is accepting customers.

3.1.7 – O365 SharePoint (O365)

Description: The consolidation and modernization of existing SharePoint capabilities along with other ED internal and external information dissemination functionality into Office 365 will be a significant and long term transformational project for ED. The Department's SharePoint services will migrate from NGDC to O365. Since O365 will be hosted outside of PIVOT-H by a commercially hosted facility, this project is not impacted by any PIVOT-H, NGDC or EDCHA projects. The proposed end state is a single enterprise SharePoint for ED.

Recommended Project Lead: J. Woodard & S. Lowry

IT Investment Segment: IT Infrastructure

Recommended Start Date: June 2020 (or sooner)

Predicted Duration: 1 Year

Other IT Services (their capabilities) integrated into this IT Service: Share.ED.gov, FSA.Share.ED.gov, ConnectED, KM team Sites, IDEA Analysis Communications Dissemination and Meetings, Adobe Experience Manager (AEM), Enterprise Citrix Solution, Enterprise Project Portfolio Management (EPPM), Lessons Learned Database, Conference Request and Peer Review System (CRPRS)

Pre-requisites: O365 contract mods are complete for enhanced service, budget needs are identified and allocated for the SharePoint move from NGDC to O365, and trained transition personnel are identified and resourced.

3.1.8 – Enterprise Data Warehouse

Description: The creation of an ED Enterprise Data Warehouse will be the single largest IT modernization project for the Department. When IT Cadre introduced this concept to ED stakeholders, there was a strong positive reception to this centralized data repository against which individuals can run reports and models. This enterprise set of data would be controlled and accessed by authorized users using an available set of data analysis and reporting tools. There are some concerns that need to be addressed:

- Policies and procedures in place to control access to the data
- Performance speeds at least as good as they are currently (proof before commitment)
- Needs to be as user friendly as a locally hosted database with analytic tools installed on the desktop
- Governance and procedures to allow customers to submit modifications as requirements and regulations change

Currently, ED has a data analysis service under the overarching title called EDison led by Hillary Cronin in the Risk Management Service. Building off of this capability would be a good place to start. IT Cadre recommends this project be done in phases, but acknowledges that close coordination with the hosting vendor is paramount to this being successful.

1. Establish a Transactional Data Repository
2. Create a Data Lake

3. Establish ETLs between the Data Repository and the Data Lake
4. Bring in the functionality of EDison
5. Over time, migrate in the data from other systems

Recommended Project Leads: H. Cronin & A. Hill

IT Investment Segment: IT Infrastructure

Recommended Start Date: January 2019

Predicted Duration: Up to 3 years

Other IT Services (their capabilities) and data sets Integrated into this IT Service: CKAN Development for ED Data Catalog, Edison (QASP Tool, Continuous Controls Monitoring, Budget Service Prioritization Tool, GrantWorks, TAGR-OCR, TAGR-OSERs, Grant Monitoring Report, EDMDM System, FSA Audit Review System, Information Assurance Reporting and Dashboard, ED DataExpress, Nortridge Loan System (NLS), Fiserv Frontier, Student Loan Model, National Reporting System, BS Budget Formulation Database, EDWare, Pell Grant Estimation Model, OPE/HBCU Access Database, OIG Data Analytics (as permissible), Perkins Information Management Application, Title II State Reporting, Clean Impact Scorecard, Information Resource @ Folio, National Clearinghouse English Language Acquisition, Bank Financial Information System, Public Grant Database, EDWA Database, Financial Partners Database, and the Lessons Learned Database.

Pre-requisites: Migration all above identified systems from EDUCATE to PIVOT-H is complete prior to inclusion in the Data Warehouse.

3.1.9 – EDSTAR

Description: The Department of Education Security Tracking and Reporting System (EDSTAR) is designed to implement the requirements of the Homeland Security Presidential Directive (HSPD) 12 requiring the federal standard for Personal Identity Verification (PIV). This is a modernization from legacy hardware and platform to a cloud instantiation (or virtualization) of EDSTAR capability.

Recommended Project Lead: L. Flowe

IT Investment Segment: Information Assurance

Recommended Start Date: January 2019

Predicted Duration: 6 months

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: PIVOT-H environment established and EDSTAR is migrated to PIVOT-H on its legacy hardware and platform (i.e., “forklift and shift”).

3.1.10 – EDUCATE to PIVOT Migration

Description: This migration project is the movement (primarily “lift and shift” in current configuration) of all IT Services currently hosted in the EDUCATE hosting facility by NTT Data Systems into the newly awarded PIVOT-H cloud hosting environment (IBM) with the integrator (CSRA). With the current EDUCATE contract ending on 31 December 2018, there is an urgency to complete this migration in less than 6 months. The network and core service components (backbone, MTIPS, EDNIS, Network Administration and Monitoring, Storage System Administration and Monitoring, Security Administration and Monitoring, and Continuous Diagnostics) are to be in place in the first 60 days with all other EDUCATE hosted IT Services migrating into PIVOT-H by 31 December 2018.

Recommended Project Lead: J. Morgan

IT Investment Segment: IT Infrastructure

Recommended Start Date: 1 July 2018 (or upon resolution of contract action)

Predicted Duration: 6 months

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: In order to complete the migration by the end of December 2018, the migrations must happen at approximately 3.5 IT Service migrations per week. This assumes that migrations begin o/a 1 September 2018 and run for 15 work weeks (75 days).

3.1.11 – PIVOT/NGDC to EDCHA Migration

Description: The Department of Education Consolidated Hosting Area (EDCHA) is an initiative to consolidate from ED’s two primary hosting areas, PIVOT-H and NGDC, into a single hosting area. This project is most likely to yield the greatest amount of IT investment savings upon completion. OCIO and ED do not have to make this decision immediately since this migration is not expected to start until FY2022. ED can use this time to evaluate both hosting areas (and possibly a third option) to determine the best course of action for EDCHA. IT Cadre foresees three possible courses of action:

1. The IT Services hosted in PIVOT-H migrate to the NextGen Data Center (NGDC), and then PIVOT-H is closed. This would involve the migration of 47 IT Services beginning in FY2022.
2. The IT Services hosted in NGDC migrate to the PIVOT-H, and then the NGDC is closed. This would involve the migration of nine IT Services beginning in FY2022.
3. Both PIVOT-H and the NGDC migrate into a 3rd (new) hosting area, and both PIVOT-H and the NGDC are closed. This would involve the migration of 56 IT Services beginning in FY2022.

Recommended Project Lead: A. Hill, K. Kimball

IT Investment Segment: IT Infrastructure

Recommended Start Date: July 2021



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Predicted Duration: 6 months.

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: Decision on course of action made at least 6 months prior to start date. Contract mods or new contract arrangements are made and awarded.

3.1.12 – Common Origination and Disbursement (COD) and EDWA Migration from TSYS to AWS

Description: COD is the #1 dollar IT Investment for ED. It is being modernized as well as migrated from TSYS to AWS. COD will be migrating its legacy mainframe infrastructure into an AWS Federal Cloud environment.

Recommended Project Lead: TBD, but within FSA

IT Investment Segment: Loans

Recommended Start Date: In Progress

Predicted Duration: Up to 10 months

Other IT Services (their capabilities) integrated into this IT Service: EDWA (Data Warehouse)

Pre-requisites: n/a

3.1.13 – Customer Engagement Management Solution (CEMS)

Description: CEMS will be standing up in Salesforce

Recommended Project Lead: TBD, but within FSA

IT Investment Segment: Loans

Recommended Start Date: In Progress

Predicted Duration: Up to 6 months

Other IT Services (their capabilities) integrated into this IT Service: Ombudsman Case Tracking System (OCTS) – in Salesforce, and Borrower Defense Tracking System (BDT) – in the Virtual Data Center (VDC)

Pre-requisites: n/a

3.1.14 – OPM Performance Management System assumes functionality of the FSA Performance Awards Tracking System (PATs)

Description: The OPM Performance Management System is to be enhanced in the next two years to perform both awards tracking and performance. When this capability enhancement is complete, OPM's Performance Management System can assume the role of the FSA PATs.

Recommended Project Lead: M. Toledo

IT Investment Segment: Loans

Recommended Start Date: July 2021 (or sooner)

Predicted Duration: Up to 3 months

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: OPM's enhanced system fully operational and accepting customers.

3.1.15 – Audit Accountability Resolution and Tracking System (AARTS)

Description: Currently, AARTS provides an audit IT capability for both financial transactions as well other audit requirements across the Department. AARTS is the application version of the current system AARTS. This is the transition from a stand-alone system to an application within PIVOT-H. No significant enhancements have yet to be identified, but it is feasible during research phase the project lead could identify improvements or enhancements to the current system.

Recommended Project Lead: A. Bolton-Smith

IT Investment Segment: Information Dissemination

Recommended Start Date: January 2019

Predicted Duration: 6 months

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: PIVOT-H environment established and able to accept migrations from EDUCATE. Also, PIVOT-H team is able to rapidly develop new applications.

3.1.16 – Rehabilitation Service Administration Management Information System (RSA-MIS) 3.0

Description: The Department of Education's Rehabilitation Services Administration – Management Information System. RSA-MIS provides leadership and administration of basic state and formula grants programs, service projects, rehabilitation training discretionary grant programs, and Randolph-Sheppard vending facilities programs. This will include a migration from Cold Fusion to Drupal content management platform and renewal of authority to operate.



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Recommended Project Lead: K. Schellenberg (retires 1 March 2019) & J. Johnson

IT Investment Segment: Information Dissemination

Recommended Start Date: January 2019

Predicted Duration: 2 months

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: PIVOT-H environment established and able to accept migrations from EDUCATE. Also, PIVOT-H team is able to rapidly develop new applications.

3.1.17 – NextGen Financial Services Environment

Description: The NextGen Financial Services Environment is the current ED/FSA initiative to consolidate the loan servicing functionality and systems (except COD and EDWA) under a single contract. This could be broadly referred to as “loan servicing as a service”. These systems are currently located either in FSA’s NextGen Data Center or externally hosted by a commercial entity.

Recommended Project Lead: TBD from within FSA

IT Investment Segment: Loans

Recommended Start Date: July 2019

Predicted Duration: Up to 1 year

Other IT Services (their capabilities) integrated into this IT Service: The functionality of the loan servicers, private collection agencies, guaranty agencies, Customer Engagement Management Solution (CEMS), Debt Management Collection System (DMCS), FSA Information for Counselors/Financial Aid Toolkit (FSAIC), Central Processing System (CPS 2.0), Electronic Cohort Default Rate Appeals (eCDR), Student Aid Internet Gateway (SAIG), Title IV Loans Participants Systems (eZAudit and Post-Secondary Education Participants (PEPS)), and NSLDS.

Pre-requisites: Contract action complete for source selection.

3.1.18 – PIVOT Backbone

Description: This is the first of the PIVOT Network and Core Services needed to migrate IT Services into PIVOT-H. Along with PIVOT Network Monitoring and Security, this project includes PIVOT-N MTIPS and EDNIS and will be one of the first projects initiated in the new PIVOT-H hosting area.

Recommended Project Lead: J. Morgan

IT Investment Segment: IT Infrastructure

Recommended Start Date: Planning already in progress and should be ready to initiate on day one of the



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contract award

Predicted Duration: Up to 60 days

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: Contract award finalized and protest period complete.

3.1.19 – PIVOT Network Monitoring

Description: This is the second of the PIVOT Network and Core Services needed to migrate IT Services into PIVOT-H. Along with PIVOT Backbone and Security, this project includes PIVOT-N Network Administration and Monitoring (EDCIS) and Storage System Administration and Monitoring (EDMASS) and will be one of the first projects initiated in the new PIVOT-H hosting area.

Recommended Project Lead: J. Morgan

IT Investment Segment: IT Infrastructure

Recommended Start Date: Planning already in progress and should be ready to initiate on day one of the contract award

Predicted Duration: Up to 60 days

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: Contract award finalized and protest period complete.

3.1.20 – PIVOT Security

Description: This is the third of the PIVOT Network and Core Services needed to migrate IT Services into PIVOT-H. Along with PIVOT Backbone and Network Monitoring, this project includes PIVOT-N Security Administration and Monitoring (ED Security) and Continuous Diagnostics and Migration (CDM Toolkit) and will be one of the first projects initiated in the new PIVOT-H hosting area.

Recommended Project Lead: R. Bova

IT Investment Segment: IT Assurance

Recommended Start Date: Planning already in progress and should be ready to initiate on day one of the contract award

Predicted Duration: Up to 60 days

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: Contract award finalized and protest period complete.



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3.1.21 – Office of Civil Rights Case Activity Management System (OCR-CAMS)

Description: This project includes the integration of capability of the Complaint Assessment system into OCR-CAMS. This will be done after OCR-CAMS has migrated from EDUCATE into PIVOT-H.

Recommended Project Lead: T.Wang & J. Lumford

IT Investment Segment: Compliance

Recommended Start Date: January 2019

Predicted Duration: 6 months

Other IT Services (their capabilities) integrated into this IT Service: Complaint Assessment

Pre-requisites: Migration of OCR-CAMS into PIVOT-H

3.1.22 – Sunflower

Description: This project is an opportunity for ED to modernize the capabilities of this IT Service. After a business case analysis, the PM should recommend an appropriate specific course of action. When considering a significant overhaul to the service, the PM should consult with the PIVOT-H integrator/vendor to seek out in house capabilities and existing products and applications that meet the requirements of the current Sunflower Asset Management System. The PM should also research an opportunity to integrate this service (or possibly replace it altogether) into the ED Enterprise Data Warehouse.

Recommended Project Lead: J. Jordan

IT Investment Segment: Facilities Management

Recommended Start Date: February 2019

Predicted Duration: 6 months

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: Sunflower is migrated into PIVOT-H

3.1.23 – Impact Aid

Description: This project is an opportunity for ED to modernize the capabilities of this IT Service to distribute aid to towns/cities impacted by the loss of tax revenue due to federal lands within their jurisdiction. After a business case analysis, the PM should recommend an appropriate specific course of action. When considering a significant overhaul to the service, the PM should consult with the PIVOT-H integrator/vendor to seek out in house capabilities and existing products and applications that meet the requirements of the current Impact Aid IT service. The PM should also investigate the long term feasibility of consolidating the capabilities of Impact Aid into the modernized version of the ED Grant Management System "G6".



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Recommended Project Lead: M. Hall

IT Investment Segment: Grants Management

Recommended Start Date: January 2019

Predicted Duration: 3 months

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: Impact Aid is migrated into PIVOT-H

3.1.24 – Digital Signage

Description: This project is an opportunity for ED to modernize and consolidate the capabilities of this IT Service. After a business case analysis, the PM should recommend an appropriate specific course of action. When considering a significant overhaul to the service, the PM should consult with the PIVOT-H integrator/vendor to seek out in house capabilities and existing products and applications that meet the requirements of both the current Digital Signage and FSA's Digital Signage.

Recommended Project Lead: J. Jordan and a SME from FSA's Digital Signage

IT Investment Segment: Facilities Management

Recommended Start Date: April 2019

Predicted Duration: 6 months

Other IT Services (their capabilities) integrated into this IT Service: FSA Digital Signage

Pre-requisites: Digital Signage migrated into PIVOT-H

3.1.25 – ReserveED 2.0

Description: This project is an opportunity for ED to modernize the capabilities of this IT Service. After a business case analysis, the PM should recommend an appropriate specific course of action. When considering a significant overhaul to the service, the PM should consult with the PIVOT-H integrator/vendor to seek out in house capabilities and existing products and applications that meet the requirements of the current ReserveED and the Event Online Registration System.

Recommended Project Lead: J. Jordan

IT Investment Segment: Facilities Management

Recommended Start Date: March 2019

Predicted Duration: 6 months



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Other IT Services (their capabilities) integrated into this IT Service: Event Online Registration System

Pre-requisites: ReservED and the Event Online Registration System are migrated into PIVOT-H

3.1.26 – EDFacts 2.0

Description: EDFacts 2.0 is a modernization project to incorporate the functionality of the EDFacts Submission system and virtualize the software as an application. After a business case analysis, the PM should recommend an appropriate specific course of action. When considering a significant overhaul to the service, the PM should consult with the PIVOT-H integrator/vendor to seek out in house capabilities and existing products and applications that meet the requirements of the current EDFacts and the Submission System. Additionally, the PM should investigate the feasibility of incorporating the EDFacts pre-K through 12 data and reporting into the ED Enterprise Data Warehouse – with the long term goal to eliminate the need for this separate system.

Recommended Project Lead: B. Timm

IT Investment Segment: Evaluation and Policy Analysis

Recommended Start Date: January 2019

Predicted Duration: 6 months

Other IT Services (their capabilities) integrated into this IT Service: EDFacts Submission System (ESS)

Pre-requisites: EDFacts and the EDFacts Submission Systems (ESS) are migrated into PIVOT-H

3.1.27 – ED FOIA Management System

Description: This project is an opportunity for ED to modernize and consolidate the capabilities of the two Department FOIA management systems – FOIA Xpress and FOIA Integrity Management System (FIMS). After a business case analysis, the PM should recommend an appropriate specific course of action. When considering a significant overhaul to the service, the PM should consult with the PIVOT-H integrator/vendor to seek out in house capabilities and existing products and applications that meet the requirements of the current FOIA Management System. In addition, other government agencies may have a pay for use shared service that may be viable.

Recommended Project Lead: C. Reed & A.M. Pedersen

IT Investment Segment: Compliance

Recommended Start Date: Jan 2019

Predicted Duration: Up to 1 year



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Other IT Services (their capabilities) integrated into this IT Service: FSA's FOIA Integrity Management System (FIMS) and FOIA Xpress.

Pre-requisites: n/a

3.1.28 – ClearWell

Description: This project is an opportunity for ED to modernize the capabilities of this IT Service which provides eDiscovery services to the Department. ClearWell has a close relationship with FOIA Xpress. After a business case analysis, the PM should recommend an appropriate specific course of action. When considering a significant overhaul to the service, the PM should consult with the PIVOT-H integrator/vendor to seek out in house capabilities and existing products and applications that meet the requirements of the current ClearWell IT Service.

Recommended Project Lead: C. Reed

IT Investment Segment: Compliance

Recommended Start Date: Feb 2019

Predicted Duration: 3 months

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: n/a

3.1.29 – Department of ED Parking Tracking System 2.0

Description: This project is an opportunity for ED to modernize the capabilities of this IT Service. After a business case analysis, the PM should recommend an appropriate specific course of action. When considering a significant overhaul to the service, the PM should consult with the PIVOT-H integrator/vendor to seek out in house capabilities and existing products and applications that meet the requirements of the current ED Parking Tracking System.

Recommended Project Lead: TBD (OM/FM)

IT Investment Segment: Facilities Management

Recommended Start Date: Dec 2019

Predicted Duration: 3 months

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: n/a

3.1.30 – ED Investigative Tracking System (EDITS)

Description: The U.S. Department of Education (ED) Office of Inspector General (OIG) Investigations Tracking System (EDITS) is a web-based system that tracks leads, investigations, and complaints that Special Agents and the Hotline Staff, respectively, use for case management and program referral capabilities.

[source:ED.gov/notices/pia/org-pia041013.pdf]

Recommended Project Lead: C. Jackson

IT Investment Segment: Compliance

Recommended Start Date: July 2021

Predicted Duration: Up to 4 months

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: EDCHA decision has been made and EDCHA designee is ready to receive new IT Services.

3.1.31 – Accreditation & State Liaison (ASL/eRecognition)

Description: ASL will migrate from Cold Fusion platform to Drupal or Appian platform. This project also includes migrating ASL from AWS E-W to PIVOT. It must be completed by June 2019 to comply with OCIO content management modernization.

Recommended Project Lead: V. Lefor

IT Investment Segment: Information Dissemination

Recommended Start Date: January 2019

Predicted Duration: 6 months

Other IT Services (their capabilities) integrated into this IT Service: n/a

Pre-requisites: n/a

3.2 – IT Service Migration Tables

3.2.1

IT Service Migrations to **PIVOT-H** (No Modernizations Identified at this Time)

IT Service Name	Current Location	Planned Migration Start Date	Estimated Duration (includes planning)	Recommended Project Lead	IT Investment Segment
ED Guest and Corporate Wireless	External Commercial	Oct 2019	3 Months	A. Hill	IT Infrastructure
LINCS	External Commercial	April 2020	3 Months	M. Maralit	Info Dissemination
NICRA	External Commercial	Dec 2019	3 Months	F. Outland	Financial Management
Wizehive (OLAS)	External Commercial	April 2019	6 Months	C. Kuzner	Info Dissemination
Charter Schools Program (CSP) Online Data and Monitoring	External Commercial	March 2020	3 Months	P. Kilby-Robb	Info Dissemination
Learning Registry (candidate for retirement)	External Commercial	March 2020	3 Months	S. Trettin	Info Dissemination
Migrant Student Information Exchange (MSIX)	External Commercial	April 2020	3 Months	P. Meyertholen	Info Dissemination
Personal Development Program Data Collection System (PDPDCS)	External Commercial	June 2020	3 Months	B. Jones	Financial Management
Real Property Case Tracking System	External Commercial	June 2020	3 Months	TBD: (OM/FM)	Facilities Management
I3COP Public Website (ED.gov candidate?)	External Commercial	July 2020	3 Months	K. Terpak	Info Dissemination (recommended)



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Information Collect, Request, Approval System (ICCRAS)	External Commercial	Nov 2020	3 Months	S. Valentine	Evaluation and Policy Analysis
iComplaints	External Commercial	Nov 2020	3 Months	B. Fenwick	Facilities Management
Labor and Employee Relations Branch Tracking System	External Commercial	Dec 2020	3 Months	TBD: (OM/HCM)	Facilities Management
Alternate Dispute Resolution Case Tracking System (ADRCTS)	External Commercial	Mar 2021	3 Months	D. Wortham	Facilities Management
AutoCAD	External Commercial	Mar 2021	3 Months	J. Jordan	Facilities Management
Federal Student Aid Digital Communications Tool	External Commercial	Jul 2021	3 Months	TBD: (FSA)	Loans

3.2.2 IT Service Migrations to **Office 365/SharePoint Capability** (No Modernizations Identified at this Time)

IT Service Name	Current Location	Planned Migration Start Date	Estimated Duration (includes planning)	Recommended Project Lead	IT Investment Segment
FSA.Share.ED.gov	NGDC	Oct 2020	4 Months	J. Woodard & S. Lowry	Loans
Enterprise Citrix Solution (ECS)	NGDC	Mar 2021	2 Months	J. Woodard & S. Lowry	Loans
Enterprise Project Portfolio Mgmt (EPPM)	NGDC	April 2021	2 Months	J. Woodard & S. Lowry	Loans
Lessons Learned Database Service	NGDC	May 2021	1 Month	J. Woodard & S. Lowry	Loans

Conference Request and Peer Review (CRPRS)	NGDC	Mar 2021	3 Months	J. Woodard & S. Lowry	Loans
ConnectED	NGDC	May 2021	3 Months	J. Woodard & S. Lowry	Loans
Knowledge Management Sites	NGDC	May 2021	3 Months	J. Woodard & S. Lowry	Loans
Service.share.ed.gov	NGDC	May 2021	3 Months	J. Woodard & S. Lowry	Loans
IDEA Analysis communications and Dissemination Capability	NGDC	May 2021	3 Months	J. Woodard & S. Lowry	Loans
ADOBE Experience Manager Capability	NGDC	May 2021	3 Months	J. Woodard & S. Lowry	Loans

3.2.3 IT Service Migrations to **ED Enterprise Data Warehouse** (No Modernizations Identified at this Time)

IT Service Name	Current Location	Planned Migration Start Date	Estimated Duration (includes planning)	Recommended Project Lead	IT Investment Segment
EDWA	AWS	Nov 2020	2 Months	A. Hill & H. Cronin	Loans
Lessons Learned Database Data	NGDC	Dec 2020	2 Months	A. Hill & H. Cronin	Loans

3.2.4 IT Service Migrations to **ED Consolidated Hosting Area (EDCHA)** (No Modernizations Identified at this Time)

IT Service Name	Current Location	Planned Migration Start Date	Estimated Duration (includes planning)	Recommended Project Lead	IT Investment Segment
FSA Digital Communications Tool ¹	Salesforce	Jul 2021	3 Months	TBD: (FSA)	Loans
Case Tracking and Reporting System	NGDC	Oct 2021	4 Months	TBD: (FSA)	Loans
FSA Rational Environment	NGDC	Oct 2021	4 Months	TBD: (FSA)	Loans
Integrated Student Experience (ISE)	NGDC	Oct 2021	4 Months	TBD: (FSA)	Loans
Financial Partners Portal	NGDC	Oct 2021	4 Months	TBD: (FSA)	Loans

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¹ Not depicted on the roadmap

HEAL Online Processing System (HOPS)	NGDC	Oct 2021	4 Months	TBD: (FSA)	Loans
Information for Financial Aid Professionals (IFAP)	NGDC	Oct 2021	4 Months	TBD: (FSA)	Loans
Enterprise Service Bus (ESB)	NGDC	Oct 2021	4 Months	TBD: (FSA)	Loans
Enterprise Performance Testing (EPT)	NGDC	Oct 2021	4 Months	TBD: (FSA)	Loans
Integrated Technical Architecture (ITA)	NGDC	Oct 2021	4 Months	TBD: (FSA)	Loans

3.3 – External Commercial Service Provider Reductions

This transition plan allows the Department to consolidate from 25 External Commercial Service Providers (above PIVOT and NGDC) to nine. Each fiscal year of the Roadmap, the Department can eliminate a number of these providers based on the projects or migrations completed. These are explained by fiscal year in the sections that follow.

3.3.1– FY2019

The ServiceNow hosting contract can sunset when the EDison platform and application capabilities are migrated to the ED Data Warehouse.

The ADTI hosting contract can sunset when ED.gov is migrated into PIVOT-H at the beginning of the Web Consolidation IT Modernization project.

The TSYS hosting contract can sunset when COD and EDWA are migrated and modernized into the AWS GovCloud environment.

The IBM hosting contract can sunset when OPE's HEP/CAMP Technical Assistance and Logistics Support system are retired from the ED IT environment.

The contract for the cloud service provider in Richmond, TX can sunset when the Security Learning and Touch Management System (STLMS) capabilities are provided by the Department of Interior (DOI) Business Center Fed talent System.



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3.3.2– FY2020

The RTI hosting contract can sunset when the Perkins Information management System (PIMS) capability is provided by the ED Data Warehouse.

The WestED hosting contract can sunset when the Charter Schools Program (CSP) Online Data and Monitoring system is migrated into PIVOT-H.

The Westat hosting contract can sunset when the following migrations and consolidations are complete.

- Web Consolidation into ED.gov: Magnet Schools Assistance Program (MSAP) Center, Teaching Incentive Fund (TIF) Annual Performance, Promise Neighborhood website
- Capability consolidation into ED Data Warehouse: Clear Impact Scorecard, Title II State Reporting System
- Migration into PIVOT-H: Personnel Development Program Data Collection System (PDPDCS)

The LMCI hosting contract can sunset when the National Clearinghouse for English Language Acquisition (NCELA) capability is provided by the ED Data Warehouse.

The GDIT hosting contract can sunset when the NextGen Financial Services Environment provides the capability of the Debt Management Collection System (DMCS).

The OracleRightNow hosting contract can sunset when the NextGen Financial Services Environment provides the capability of the Federal Student Aid Information Center (FSAIC).

The AIR hosting contract can sunset when the following consolidations are complete.

- Web Consolidation into ED.gov: IDEA Analysis, Communications, Disseminations, and Meetings; National Charter Schools Resource Center
- Capability consolidation into ED Data Warehouse: Public Grant Database

The contract for the AT&T hosting contract can sunset when the ED Guest and Corporate Wireless system is migrated into PIVOT-H.

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The Applied Engineering Management (AEM) hosting contract can sunset when the enhanced Grants Management System “G6” provides the capability of GRADS 360 and SPP/APR Module and Customer Service Database.

The Micropact hosting contract can sunset when the following IT Services complete their migration into PIVOT-H: Real Property Case Tracking System, Department of ED Parking Tracking System 2.0, iComplaints, Labor and Employee relations Branch Tracking System, and Alternate Dispute Resolution Case Tracking System (ADR CTS).

The Salesforce hosting area contract can sunset when the FSA Digital Communications Tool completes migration into the ED Consolidated Hosting Area (EDCHA).

4.0 – Next Steps

IT Cadre's Visualization Engineering® approach draws key information from silos of information across systems, applications and organizational operations, including critical areas of concern, and rapidly delivers work products that capture the organization's operational foundation relative to its mission and values.

Based upon the Department of Education (ED) organizational needs, IT Cadre recommends the following packages.

- Executive Communications Support
- Cost Range Analysis
- Program Assurance
- Web Consolidation Visualization Support

4.1 - Executive Communications Support, 60 Days

IT Cadre will develop a series of focused diagrams to facilitate meetings between the Department CIO and senior leaders in Principal Office Components (POCs) and Support Offices. These products will be tailored to the CIO "marketing campaign" to gain commitment across the Department to the transition plan (Strategic Roadmap). They can represent the ED enterprise as well as individuals POCs. IT Cadre will be prepared to present these products to the stakeholder leaders at these meetings.

The Current State diagram establishes where things are today and gains agreement on what problems need to be solved to increase effectiveness and efficiencies. The Future State diagram sets the vision for achieving the transformation. The Strategic Roadmap operationalizes an executable strategy for achieving desired outcomes. The Executive Communications Support package takes these artifacts out to the people who need to understand why, how and when the changes in capabilities will affect them. This can apply to internal organizations, external organizations, and supported customers. This visual communications support needs to take place face to face with leaders of internal groups and supported agencies to ensure the message is effectively communicated and to provide an environment where people can deeply understand the goals, outcomes and dependencies and the team can note any exceptions and bring them back to make the plan stronger.

4.2 - Cost Range Analysis, 60 Days

IT Cadre, working with your team, will develop a list of cost assumptions and collect cost data to create a cost range estimate of a future or ongoing program. The cost range analysis model for transitioning from the Current State to the Future State 5-Year Vision will be based on the IT projects and migrations as depicted in the Strategic Roadmap. This estimate can include cost support for labor, system licenses, yearly maintenance, testing, and materials as well as new system training, legacy system sunset and disposal. IT Cadre will run scenario-based analytical simulations to provide a comprehensive cost range model for senior management and PMs. This cost range support model can be used to augment government cost estimates (GCEs) and



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potentially reduce risk of cost and schedule overruns. It also supports what-if analysis and allows the customer to pick a cost range based on probability confidence levels.

4.3 - Visual Program Assurance (6 Months base support with a 6 Month Follow-on Option)

IT Cadre will provide support to senior executives and key stakeholders to ensure IT Modernization projects remain on track to meet objectives. This includes periodic updates to the Strategic Roadmap as project timelines and/or Department priorities change. This support will provide leaders with an innovative way to see progress and potential obstacles throughout the organization's transformation. Visual reviews with stakeholders will assess the accuracy, quality, and progress of the transition and communicate to leaders the actions needed to keep on track.

Visual Program Assurance support will focus on outcome-oriented techniques to align and integrate transformation efforts in support of a Program Management Office (PMO). These techniques increase transparency to promote ownership and accountability, make issues and trends that might become problems readily apparent, increase the pool of possible problem solvers by broadening stakeholder engagement where possible, and maximize team productivity and contribution. IT Cadre will independently identify emerging issues and trends using existing data and form creative action plans to increase decision speed. This support will significantly improve the efficiency and effectiveness of meetings by using the Visualization artifacts which reveal the end-to-end integrated enterprise view tying mission to operations and supporting IT systems.

4.4 - Website Consolidation Visualization Support, 6 months total

IT Cadre will provide support to OCIO IT Program Management Directorate to gain a shared understanding of the current state of websites throughout the Department, establish a shared agreement to the future state, and arrive at a shared commitment to the roadmap that lays out the details in a series of sub-tasks and timeline to the Department's web consolidation project.

Website Consolidation Current State, 60 days:

IT Cadre will validate the list of ED websites from the Department of Education website inventory dated 31 May 2018 or a more recent version if it is available. IT Cadre will meet with named stakeholders (points of contact) named in the website inventory to verify accuracy of the list. IT Cadre will also independently verify each of the approximately 700 URLs at a rate of 15-20 per day. At the end of the current state, IT Cadre will deliver a visualization diagram that depicts department websites by hosting area, internal vs external, trusted internet connection (TIC), content management system (CMS), capability provided (e.g., Technical Assistance Center), operating costs (if known), and URL/domain.

Website Consolidation Future State, 60 days:



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IT Cadre will use its visualization engineering approach to build on findings and recommendations from the current state. The future state achieves a shared agreement across the Department to visualization diagram that enables the following website consolidation project objectives.

1. Reduce the overall number of ed.gov subdomain websites
 - a. Reestablish the Department as the primary brand instead of individual project brands
 - b. Reduce the cost to host, operate and maintain a large inventory
 - c. Less sites are easier to track, secure and manage
2. Consolidate and standardize like capabilities, such as Technical Assistance Centers.
3. Eliminate non-.gov websites where possible.
4. Consolidate information dissemination sites to the enterprise CMS.

Website Consolidation Roadmap, 60 days:

IT Cadre will develop a Web Consolidation Roadmap to show how to transition from the Current State to the Future State. The Roadmap will address the entire project from end-to-end establishing the major tasks to move from the current to future state; delineating functional milestones, dependencies and cross-functional impacts; and establishing the path ahead to accomplish desired objectives to support the approved direction. Analysis will discover and highlight gaps, conflicts, and redundancies; recommend measures to mitigate risks, integrate organizational responsibilities and timing into technical delivery. This Roadmap will establish a shared vision that operationalizes an executable strategy for achieving the desired outcomes. And it will serve as the bridge between current and future state.

Appendix A – IT Project Spreadsheet

(Submitted electronically)

Appendix B – Key Stakeholder and Meeting Master List

Point of Contact	Title	Email Address	Office Phone Number	Office Location	Current State Date Interviewed	IT Services Assessment Updates	Future State Date Interviewed	Roadmap Date Interviewed
Jason Gray	ED CIO	jason.gray@ed.gov	(202)245-6252	PCP 9112	9/26/2017, 11/9/2017	2/8/2018	2/8/2018, 3/7/2018	5/14/2018
Britt Jung	OCIO Chief of Staff					2/8/2018	2/8/2018, 3/6/2018	
Walter McDonald	Sponsor, Director of IT Program Services, IT Management Segment Owner	Walter.McDonald@ed.gov			Weekly Updates	Weekly Updates	Weekly Updates, 2/26/2018	Weekly Updates, 5/3/2018, 5/14/2018
John Faircloth	Program Manager, IT Modernization Enterprise Program Management Office (EPMO)	John.Faircloth@ed.gov	(202)245-6014	PCP 9161	Weekly Updates	Weekly Updates	Weekly Updates, 2/26/2018	Weekly Updates, 5/3/2018
Steven Corey-Bey	Lead ED Point of Contact, Project Manager/Chief EA	Steven.Corey-Bey@ed.gov	(202)245-6437	PCP 9060	Daily Updates	Weekly Updates	Daily Updates, 2/26/2018	Daily Updates
John Woodard	Knowledge Manager	John.Woodard@ed.gov			10/10/2017, 10/24/2017		2/26/2018	5/9/2018
Kara Jagessar	Contracting Officer's Rep (COR)	kara.jagessar@ed.gov	(202)245-7180		Weekly Updates	Weekly Updates	Weekly Updates, 2/26/2018	Weekly Updates
Heather Watroba	Contract Officer (CO)	Heather.Watroba@ed.gov						
Michael Bates	Contract Specialist (CS)	Michael.Bates@ed.gov						
Ann Kim	Security Engineering and Architecture Team Supervisor	ann.kim@ed.gov	(202)245-7076	PCP 10106	10/10/2017, 10/24/2017			
Carolynn Hammersmith	Development Services Team Supervisor, Information Dissemination Segment Owner	carolynn.hammersmith@ed.gov	(202)245-6153	PCP 9065	10/10/2017, 10/24/2017		2/21/2018, 3/26/2018	5/9/2018, 5/21/2018, 5/31/2018
Sabrina Lowry	ConnectED System Owner, Information Dissemination Segment						2/21/2018	5/9/2018
Steven Hernandez	Chief Information Security Officer (CISO), Information Assurance Segment Owner	Steven.Hernandez@ed.gov	(202)245-7779				2/22/2018	5/10/2018, 5/14/2018
Robert Bova	IA Project Manager, Information Assurance Segment						2/22/2018	
Dan Galik	Project Manager, Information Assurance Segment	daniel.galik@ed.gov			10/10/2017			
James Gravette	Program Management Office, Information Assurance Segment						2/22/2018	
Alexis Savage-Bey	Information Assurance Segment						2/22/2018	
London Watson	Information Assurance Segment						2/22/2018	
Felix Amaro	OCIO IAS						3/6/2018	
Miguel Calen	OCIO IAS						3/6/2018	
Surendra Babu	OCIO IAS, O365 ISSO						3/6/2018	
Chris Shanefelter	Director of Financial Systems Services, Financial Management Segment	chris.shanefelter@ed.gov			10/10/2017, 10/24/2017, 10/25/2017		2/14/2018, 2/26/2018	
Chris Claiborne	Financial Systems Services, Financial Management Segment				10/10/2017, 10/24/2017, 10/25/2017		2/26/2018	5/9/2018
Richard Marth	Financial Management Segment						2/26/2018	
Dmekka Thompson	Financial Management Segment						2/26/2018	
Greg Robison	Grants Management Segment Owner (outgoing)	greg.robison@ed.gov	(202)245-7187	PCP 9150	11/9/2017		1/30/2018, 2/26/2018	
Tom Erdelyi	Grants Management Segment Owner (incoming)						1/30/2018, 2/26/2018	5/9/2018, 5/14/2018
Catherine Ricotta	Grants Management Segment Deputy Owner						1/30/2018, 2/26/2018	5/9/2018
Pamela Dawkins	G5 System Deputy PMO, Grants Management Segment						2/26/2018	5/9/2018
Luis Lopez		luis.lopez@ed.gov			10/24/2017			5/10/2018, 5/14/2018
Jesse Sharp		jesse.sharpe@ed.gov			10/24/2017			
Allen Hill	Director of IT Services; IT Infrastructure Segment Owner	Allen.Hill@ed.gov			10/10/2017, 10/24/2017		2/27/2018	5/21/2018
Justin Morgan	IT Infrastructure Segment						2/27/2018	5/10/2018, 5/21/2018
Lena Thompson	IT Infrastructure Segment, PIVOT-O/I/H						2/27/2018, 3/6/2018	
Robert Jordan	IT Infrastructure Segment						2/27/2018	
Tim Soltis	Acting CFO, Dep CFO, Financial Management Segment Owner	tim.soltis@ed.gov	(202)401-0287, (202)245-6555	LBI 5W13, PCP 6124	10/16/2017		2/14/2018, 3/20/2018	
Cynthia Heath	General Accounting Group Supervisor	Cynthia.Heath@ed.gov	(202)245-8043	PCP 6138	10/16/2017, 10/25/2017		2/14/2018	
Dan Galik	Project Manager, Financial Management Segment	daniel.galik@ed.gov			10/10/2017		3/20/2018, 3/26/2018	5/9/2018
Steven Soares	Financial Management Segment	steven.soares@ed.gov			10/16/2017, 10/25/2017, 11/7/2017		3/20/2018	
Lashawn Flemming					11/7/2017			
Sylvester Osiname					11/7/2017			
Renu Kapur					11/7/2017			
David Merril					11/7/2017			
Florine Jones					11/7/2017			
Debbie Mattingly					11/7/2017			
Ellen Safraneck	Acting Director, Compliance Segment, AARTS						2/21/2018, 3/19/2018	5/10/2018
Dave Chege	Compliance Segment, AARTS						2/21/2018	
April Bolton-Smith	Compliance Segment, AARTS						2/21/2018, 3/19/2018	5/10/2018
Jay Monitz	Compliance Segment, AARTS System Owner						2/21/2018, 3/19/2018	
Chris Dyson					11/7/2017			
Alex Torelli		alexander.torelli@ed.gov			10/16/2017			
Carolyn Dempster		carolyn.dempster@ed.gov			11/7/2017		3/20/2018	
Cyril Olufemi		cyril.olufemi@ed.gov			10/25/2017			

Office / Line of Business	Point of Contact	Title	Email Address	Office Phone Number	Office Location	Current State Date Interviewed	IT Services Assessment Updates	Future State Date Interviewed	Roadmap Date Interviewed
OM	Debra Bennett	Business Enterprise Resource Management Division Supervisor	debra.bennett@ed.gov			10/12/2017, 11/1/2017			
OM	Wanda Davis	Executive Officer				10/12/2017			
OM/CPO	Angela Arrington	FOIA XPress System Owner, Compliance Segment						2/15/2018, 3/18/2018	
OM / HR	Cassandra Cuffee-Graves	Office of Human Resources Director, Human Capital Management Segment Owner	c.cuffee-graves@ed.gov	(202)453-5588	LBJ 2W314				
OM / HR	Qiana Gray	OHR, Human Capital Management Segment						2/15/2018, 3/13/2018	
OM / HR	Naomi Sanchez	OHR, Human Capital Management Segment						2/15/2018, 3/13/2018	
OM	Stephanie Valentine		stephanie.valentine@ed.gov			11/1/2017			
OM/SFLS	Ziyada Joynes	Facilities Management Segment	ziyadah.joynes@ed.gov			10/12/2017		2/27/2018	
OM / Office of Security, Facilities, and Logistics Services (SFLS)	Ron Luczak	Office of Security, Facilities, and Logistics Director, Facilities Management Segment Owner (Outgoing)	ronald.luczak@ed.gov	(202)260-7727	LBJ 2W314	10/17/2017			
OM / Office of Security, Facilities, and Logistics Services (SFLS)	Jim Stader	Office of Security, Facilities, and Logistics Director, Facilities Management Segment Owner (Incoming)						2/27/2018, 3/6/2018	
OM/SFLS	Joy Jordan	Digital Signage System Owner, Facilities Management Segment	joy.jordan@ed.gov			10/17/2017, 11/1/2017		2/27/2018	5/11/2018
OM/SFLS	Lee Flowe	EDSTAR system manager, ISSO	lee.flowe@ed.gov			10/17/2017, 11/1/2017		3/6/2018	5/11/2018
OPEPD	Larry Kean	Acting Budget Service Director, Budget Execution and Administrative Analysis Division Director, Budget Formulation & Execution Segment Owner	larry.kean@ed.gov	(202)401-0287, (202)401-0330	LBJ 5W313, LBJ 5W203	10/10/2017, 11/2/2017		2/28/2018, 3/14/2018	5/11/2018
OPEPD / Budget Formulation and Execution	Mark Dronfield	Budget LOB, Max.Gov Budget functions and content manager, Budget Formulation & Execution Segment	mark.dronfield@ed.gov			10/10/2017, 11/2/2017		2/28/2018, , 3/14/2018	5/11/2018
OPEPD / Budget Formulation and Execution	Mary Keller	Budget LOB, Max.Gov Budget functions and content manager	mary.keller@ed.gov			10/10/2017			
OPEPD	Lauren Bloom	Budget Formulation & Execution Segment						2/28/2018, 3/14/2018	5/11/2018
OPEPD	Susanne Chesley	Budget Formulation & Execution Segment						2/28/2018, 3/14/2018	
OPEPD / Cost Estimate for Federal Loans Programs Office (CEAD)	Elise Brand	SLM System Owner, Budget Formulation & Execution Segment						2/28/2018, 3/14/2018	5/11/2018
OPEPD / PPSS	Ivan Metzger	Information Dissemination Segment , Central Data Environment	ivan.metzger@ed.gov					2/21/2018, 3/26/2018	5/11/2018
OPEPD / PPSS	Matthew Greene		matthew.greene@ed.gov			11/2/2017			
OESE / OME	Patricia Meyertholen	MSIX System Owner	patricia.meyertholen@ed.gov			10/10/2017, 11/1/2017			5/29/2018
OESE / OME	Maria Hishikawa	Information Dissemination Segment , MSIX ISSO	maria.hishikawa@ed.gov			10/10/2017, 11/1/2017		3/26/2018	5/29/2018
OESE	Mark Washington		mark.washington@ed.gov			10/10/2017, 11/1/2017			
OESE	Sarah Newman		sarah.newman@ed.gov			11/1/2017			
OESE	William Hoffman					10/10/2017			
FSA / Technology	Jason Babic	FSA Chief Enterprise Architect (EA)	jason.babic@ed.gov			10/23/2017, 10/26/2017, 11/2/2017		2/1/2018, 3/27/2018	5/3/2018, 5/11/2018
FSA / Technology	Adam Drzal	Enterprise Architect (EA)	adam.drzal@ed.gov	O (202)377-3880 M (202)731-8578		10/23/2017, 10/26/2017, 11/2/2017		2/1/2018, 3/27/2018	5/3/2018
FSA / Technology	Jonathan Keough					10/23/2017, 10/26/2017, 11/2/2017		2/1/2018	
FSA / Technology	John Fare	FSA CIO (beginning in Mar 2018)				10/23/2017, 10/26/2017, 11/2/2018		3/27/2018	5/3/2018
FSA / Technology	Steve Wengert							2/1/2018, 3/27/2018	
FSA /Business Optimization	Karen Kimball	FSA Business Optimization Unit Director	karen.kimball@ed.gov					2/1/2018, 3/27/2018	5/3/2018, 5/11/2018
FSA / Technology	Ivory Grooms							2/1/2018	
FSA / Technology	Keith Wilson	FSA CIO (until Feb 2018)	Keith.Wilson@ed.gov	(202)377-3591	UCP 112E1	10/23/2017		2/1/2018	
FSA / Technology	Leslie Willoughby	FSA Dep CIO	Leslie.Willoughby@ed.gov	(202)377-4466	UCP 102E3	10/23/2017		2/1/2018	5/10/2018
FSA / Technology	Wanda Broadus		wanda.broadus@ed.gov			10/23/2017, 11/2/2017			
FSA / Technology	Michael Holmes	FSA Security Operations Center (SOC)							
FSA / Finance	John (Jay) Hurt	Chief Financial Officer, Loans Segment Owner	john.hurt@ed.gov	(202)377-3453	UCP 54E1	10/23/2017			
FSA	John Kane		john.kane@ed.gov			10/23/2017			
FSA / Performance Management	Joe McGinnis	Performance Management Director				11/2/2017			
FSA	Michael Dean		michael.dean@ed.gov			10/23/2017			
FSA / Acquisitions	Denise Roberts					11/7/2017			
FSA	Phil Star							3/27/2018	
FSA	Sandy England		sandy.england@ed.gov			10/23/2017			

Office / Line of Business	Point of Contact	Title	Email Address	Office Phone Number	Office Location	Current State Date Interviewed	IT Services Assessment Updates	Future State Date Interviewed	Roadmap Date Interviewed
IES	Sue Betka	Deputy for Administration and Policy, Research Segment Owner	sue.betka@ed.gov	(202)245-6605	PCP 4131	10/19/2017, 10/31/2017		2/22/2018, 3/13/2018	
IES / NCES	Ross Santy	Administrative Data Division Associate Commissioner, Evaluation & Policy Analysis Segment Owner	ross.santy@ed.gov	(202)245-7384	PCP 4034	10/31/2017		2/20/2018, 3/5/2018	5/10/2018
IES	Barbara Timm	Evaluation & Policy Analysis Segment , EDFacts						2/20/2018	
IES	Sharon Dunmore	Evaluation & Policy Analysis Segment						2/20/2018	
IES	Chester Scott	Evaluation & Policy Analysis Segment						2/20/2018	
IES	Ed Vaden		ed.vaden@ed.gov			10/19/2017, 10/31/2017		3/13/2018	
IES/NCES/NAEP	Bobbi Woods	Project Manager, Research Segment	roberta.woods@ed.gov			10/19/2017, 10/31/2017		2/22/2018	
IES	Brian Taylor	Technical Director, Research Segment	brian.taylor@ed.gov			10/19/2017, 10/31/2017		2/22/2018, 3/13/2018	
IES	Erin Pollard	Business Case Manager, Research Segment	erin.pollard@ed.gov			10/19/2017, 10/31/2017		2/22/2018	
IES/NCES	Patrick Keaton	Project Manager, NCES Admin Data, Research Segment						2/22/2018	
IES	Tracy Hunt-White							2/22/2018	
IES	Meghan Pearson					10/19/2017, 10/31/2017			
OCR	Alejandro Reyes	Director, Program Legal Group, Compliance Segment Owner	alejandro.reyes@ed.gov	(202)453-6639	LBJ 4E308	10/18/2017, 10/30/2017		2/15/2018, 3/18/2018	5/10/2018
OCR	Carla Reed	Compliance Segment , FOIA						2/15/2018	5/10/2018
OCR	Mary Schifferli					10/18/2017, 10/30/2017			
OCR	Ting Ting Wang	Compliance Segment	ting-ting.wang@ed.gov			10/18/2017, 10/30/2017		3/18/2018	
OET	Qiana Gray	Human Capital Management Segment				10/12/2017		2/15/2018	
OET	Naomi Sanchez	Human Capital Management Segment				10/12/2017		2/15/2018	
OET	James Collins		james.collins@ed.gov			10/18/2017, 11/1/2017			
OET	Sara Trettin	Learning Registry System Owner				11/1/2017			5/29/2018
OELA	Melissa Escalante					10/12/2017			
OELA	Luis Nataniel					10/12/2017			
OELA	Supreet Ananand	Deputy Director				11/1/2017			
OGC	Kevin Slupe		kevin.slupe@ed.gov			10/18/2017, 10/30/2017			
OPE	Jason Cottrell		jason.cottrell@ed.gov			10/18/2017, 10/30/2017			
OPE	Shelia Barnes		shelia.barnes@ed.gov			10/18/2017, 10/30/2017			
OPE	Anthony Hales		anthony.hales@ed.gov			10/18/2017, 10/30/2017			
OPE	Emory Morrison		emory.morrison@ed.gov			10/18/2017, 10/30/2017			
OPE / PPI	Valerie Lefor	Education Program Specialist, ASL(eRecognition)System Owner	valerie.lefor@ed.gov	(202)453-7724		11/1/2017			5/29/2018
OPE / PPI	Amy Wilson	System Owner for DAPIP, Campus Crime and Security, and Equity in Athletics	amy.wilson@ed.gov			11/1/2017			5/31/2018
OPE	Jennifer Hong	NACIQI system owner							
OPE / HEP	Kathy Morgan					11/1/2017			
OPE / HEP	Joyce Fitzgerald					11/1/2017			
OCTAE	Mary Jo Maralit	LINCS owner, Information Dissemination Segment	maryjo.maralit@ed.gov			10/19/2017, 10/31/2017		2/21/2018	5/31/2018
OCTAE	Jay LeMaster	National Reporting System (NRS) Owner	john.lemaster@ed.gov			10/19/2017, 10/31/2017			
OCTAE	Jimmy Holmquist	ISSO	james.holmquist@ed.gov			10/19/2017, 10/31/2017			
OCTAE	Albert Palacios		albert.palacios@ed.gov			10/19/2017, 10/31/2017			
OCTAE	Michael Feranda	IT Specialist, NRS	michael.feranda@ed.gov			10/19/2017, 10/31/2017			
OSERS	Mary Lovley		mary.lovley@ed.gov			10/19/2017, 10/31/2017			
OSERS	Kristen Rhinehart		kristen.rhinehart@ed.gov			10/19/2017, 10/31/2017			
OSERS	Bonnie Jones		bonnie.jones@ed.gov			10/19/2017, 10/31/2017			
OSERS	Renee Bradley		renee.bradley@ed.gov			10/19/2017, 10/31/2017			
OSERS	Ken Schellenberg	RSA MIS System Owner							5/31/2018
OSERS	Melanie Winston		melanie.winston@ed.gov			10/19/2017			
OII	Liza Araujo		liza.araujo@ed.gov			11/1/2017			
OII	Charlene Riggans		charlene.riggans@ed.gov			10/23/2017			
OII	Vicki Robinson		vicki.robinson@ed.gov			10/23/2017, 11/1/2017			
OII	Kelly Terpak		kelly.terpak@ed.gov			10/23/2017			
OII	Orman Feres		orman.feres@ed.gov			10/23/2017			
OII	Venetia Richardson		venitia.sablo-richardson@ed.gov			10/23/2017			
OII	Patricia Kilby-Robb	Charter Schools Program (CSP) Online Data and Monitoring System Owner	patricia.kilby-robb@ed.gov			10/23/2017			5/29/2018
OII	Tawanna Coles		tawanna.coles@ed.gov			10/23/2017, 11/1/2017			
OCO	Caryn Kuzner	Wizehive (OLAS) System Owner							5/29/2018
OCO	Alicia Smith	Wizehive IT Support							5/29/2018
Office of the Dep Secretary / Risk Management	Hilary Cronin		hilary.cronin@ed.gov			11/7/2017		3/6/2018	5/10/2018

Appendix C – CIO Update Slides (5/14/18)

Update to the CIO IT Visualization Project

May 14, 2018



Purpose & Agenda

Purpose: Update the CIO on the IT Visualization Project (Roadmap/Transition Phase) and present recommended next steps.

- Review of CIO Strategic Objectives for 5-Year Vision
- Major events since last update
- 5-Year Vision Operating Cost Analysis
- Visualizations (fanfolds)
- Future State 5-Year Vision Anticipated Outcomes
- Major IT Projects
- Open Questions
- Next Steps



CIO Strategic Objectives for 5-Year Vision

1. Consolidate ED IT Cloud Services
2. Reduce Cybersecurity Risk
3. Modernize to Increase Business Value/Technical Business Mgmt(TBM)
 - a. Increase use of shared services
 - b. Reduce manual processes



CIO Strategic Objectives for 5-Year Vision

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CIO Strategic Objectives for 5-Year Vision

1. Consolidate ED IT Cloud Services
2. Reduce Cybersecurity Risk
3. Modernize to Increase Business Value/Technical Business Mgmt(TBM)
 - a. Increase use of shared services
 - b. Reduce manual processes



Major Events Since Last Update

- March/April - Developed two Future State 5-Year Vision COAs due to FSA pushback
 - COA 1: Future State 5-year Vision with NGDC
 - COA 2: Future State 5-Year Vision without NGDC
- 4/12 - Delivered Future State Final Visualization Diagrams and Report
- 4/26 - ACT-IAC Presentation and Membership Meeting
- 4/26, 4/30 – Delivered 15-Day Strategic Visualization Roadmap Draft
- 5/3 – OCIO and FSA meeting on Future State and Roadmap
 - Achieved shared agreement on single COA – ED Consolidated Hosting Area (EDCHA)
 - Begin consolidation in Year 3 and complete at end of Year 5
 - IT Modernization kick-off is July 1, 2018
 - VDC to NGDC migration is complete
 - Migration to PIVOT from EDUCATE begins



5-Year Vision Operating Cost Analysis

(b)(5)

Visualizations

Future State 5-Year Vision Single Course of Action (COA)



5-Year IT Modernization Strategic Roadmap



Future State 5-Year Vision Anticipated Outcomes

1. Consolidate ED IT Cloud Services
 - a. Reduction from 4 to 3 hosting environments
 - b. Reduction from 284 to 166 total IT Services (Reduced attack surface)
 - c. Consolidation from 246 to 122 "ED owned" IT Services
 - d. Reduction from 25 to 8 external commercial service providers
2. Reduce cybersecurity risk
 - a. Reduction from 113 to 39 IT Services with PII
 - b. Reduction from 25 to 9 Information Dissemination hosting platforms (See IT Services Assessment List)
 - c. Reduction from 6 to 1 External Collaboration Services
 - d. Overall significant reduction in the attack surface
3. Modernize to Increase Business Value/Technical Business Management (TBM)
 - a. Reduction from 16 to 3 manual processes for financial reconciliation
 - b. Reduction from 40 to 19 manual processes for ED Annual Performance Reports (APRs)
 - c. Elimination of 5 of the top 21 IT Investments (accounts for 8 IT Services)



Major IT Projects

1. EDUCATE to PIVOT Migration
2. EDCAPS
 - a. EDUCATE to PIVOT
 - b. PIVOT to GSA USSM
3. FSA NextGen Financial Services Environment
4. O365 Sharepoint
5. ED.gov
6. Grants Management "G6"
7. EDSTAR
8. Enterprise Data Warehouse
9. PIVOT/NGDC to ED Consolidated Hosting Area (EDCHA)



Open Questions

1. How much does it cost to transition from the As-Is State to the To-Be 5-Year Vision?
** How much more money do you need in the years of execution in order to achieve savings in the out years?*
2. Do you need Years 3, 4, and 5 to complete consolidation to the ED Consolidated Hosting Area (EDCHA)?
3. Do you have the program management support needed to direct all the IT modernization projects and efforts depicted in the Strategic Roadmap?
4. How do you keep stakeholders continuously informed of planned modernization projects and changes?

Establish a shared commitment to the plan across the Department

- Communicate to all segment owners and PMs; engage senior leaders on budget, contractual and operations impacts; resource the EPMO and project PMs.



Next Steps ... how can IT Cadre help?

1. Complete the Strategic Roadmap ●
 - A. Shared commitment across the Department to the 5-year vision and how to get there.
 - B. Enterprise view of IT Modernization projects.
2. Detailed Cost Range Analysis (2 months) ○
 - A. Comprehensive – includes labor, system licenses, yearly maintenance, testing, and materials as well as new system training, legacy system sunset and disposal.
 - B. Scenario-based analytical simulations that provide a comprehensive cost range model for senior management and PMs. Allows leaders to pick a cost range based on probability confidence levels.
 - C. Decision support tool for what-if analyses.
 - D. Feeder into Government Cost Estimates (GCEs) and organizational business case analyses.
3. Visual Program Assurance (12 months) ○
 - A. Support the Enterprise Program Management Office (EPMO).
 - B. Periodic updates to visualizations and road map.
 - C. See progress and potential obstacles throughout the transformation.
 - D. Communicate to leaders the actions needed to stay on track through visual reviews to assess the accuracy, quality, and progress of the transition.
 - E. Promote ownership, accountability, and increase transparency.
 - F. Identify emerging issues and trends using existing data and form creative action plans to increase decision speed.



Appendix D – List of Acronyms

APR	Annual Performance Report
AWS	Amazon Web Services (vendor)
BI	Business Intelligence
CIO/OCIO	Chief Information Officer/Office of the Chief Information Officer
COA	Course of Action
DR	Disaster Recovery
DW	Data Warehouse
ED	Department of Education
EDCAPS	ED's Central Automated Processing System – financial management and info systems
EDCHA	ED's Consolidated Hosting Area (working name)
EEBC	Employee Enterprise Business Collaboration
EPMO	ED/Enterprise Program Management Office
EPPM	Enterprise Project Portfolio Management
ETL	Extract, Transform, Load – process of pulling data out of source systems & loading into the DW
FISMA	Federal Information Security Modernization Act
FITARA	Federal IT Acquisition Reform Act
FM	Financial Management
FOC	Full Operational Capability
FSA	Federal Student Aid
G6	A proposed name for the modernized version of the current ED Grants Mgmt System (G5)
ICAM	Identity, Credential, and Access Management
IT	Information Technology
IPMDM	Integrated Partner Management and Data Management
KM	Knowledge Management
LLDB	Lessons Learned Data Base
MTIPS	Managed Trusted Internet Protocol Services – the connection to the internet
NGDC	Next Generation Data Base – FSA's replacement for its Virtual Data Center
O365	Microsoft Office 365
OM	Office of Management (ED)
OMB	Office of Management and Budget
OVMS	Operational Vulnerability Management Solution – system security
PEBC	Public Education and Business Coalition
PII	Personally Identifiable Information
PIVOT	Portfolio of Integrated Value-Oriented Technologies
PM	Project/Program Manager
POC	Principle Office Component
TBD	To be determined
TBM	Technical Business Management
TSYS	Total System Services (vendor)
USSM	Unified Shared Services Management
VDC	Virtual Data Center – FSA's existing data center solution