HOUSE CONCURRENT RESOLUTION NUMBER 121

House Concurrent Resolution #121, herein referred to as "HCR 121", of the 2017 Regular Session of the Louisiana legislature was approved as document number HLS 17RS-3917. The intention of HCR 121 was for the Division of Administration, Office of Technology Services (OTS) to conduct a risk assessment of the existing "mission critical information technology systems" in the executive branch and subsequently report its findings back to the legislature, with specific focus on information technology systems that are outdated or inefficient.

Within this artifact, OTS is reporting its findings for the "most at risk" systems identified during the investigation, analysis, and risk assessment for all information technology platforms, software and hardware, under the Executive Branch cabinet agencies that addresses the following questions:

- Description of systems
- Social Impact of disruption of said systems
- Economic impact of disruption of said systems
- Attributes of said systems as applied to age/length of use
- Funding mechanisms of said systems

With the completion of the review and analysis and reporting of its findings, OTS is presenting this document to the Louisiana legislature as its official response to HCR 121. A report specifically focused on information security has been created for the expressed review of the homeland security committee of the Louisiana legislature of which its contents are considered confidential and not included in this document.

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HOUSE CONCURRENT RESOLUTION NO. 121

OFFICIAL DOA-OTS RESPONSE

1201 North 3rd Street
Baton Rouge, LA 70802

JANUARY 2018

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DOCUMENT HISTORY

Version	Date	Additions/Changes	Prepared/Reviewed By
1.0	12/22/2017	Initial document creation	Allsup
1.1	2/26/2018	Deputy CIO updates and corrections for Executive Summary and Key Findings; added updates to OJJ and DOE applications.	Underwood, Allsup
1.2	3/7/2018	Quality Assurance Review	Eversull
1.3	3/12/2018	Updating of formatting following executive review	Allsup
1.4	3/15/2018	Additional content for DCO, InfoSec, and funding mechanisms	Allsup, Glover, Moore, Williams
1.5	4/3/3018	Executive Review and updates	Underwood, Allsup
1.6	4/5/2018	InfoSec content update	Glover, Allsup

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

With the rapid and ever evolving information technology (IT) landscape, in addition to multiple high-profile information security exposures over the last 24 months by private sector and public sector organizations, the State of Louisiana House of Representatives has sought the Division of Administration Office of Technology Services (OTS) to evaluate and report on mission critical information technology systems within the Executive Branch agencies to document risks associated with such aging or ineffective systems/platforms. As part of technology debt, information systems/platforms that are ineffective, outdated, or in need of design changes that follow modern IT practices for software development, information security, and storage/computing have the potential to affect the provision of services, and therefore could negatively impact the citizens of the State of Louisiana.

The results of the review and analysis of risk for all information technology platforms, software and hardware under the Executive Branch cabinet agencies identify a significant risk to applications, infrastructure, and information security measures with **11.5% of all applications and 46% of all infrastructure in a "most at risk" condition**. This risk also reveals **an estimated $959,000,000 backlog for modernizing the most at risk applications with an estimated $79,000,000 backlog for infrastructure modernization.**

Following Acts 15, 45, and 712 of the 2014 Regular Session that consolidated IT services for executive branch agencies, the Office of Technology Services (OTS) has been actively engaged in evaluating common technology requirements across programs in the executive branch with the goal of streamlining shared services, improving operational effectiveness of system performance, and reducing operating costs. In support of this goal OTS has launched initiatives including consolidation of technology hardware platforms into two State owned datacenter facilities, redesign of the State data network, creation of an enterprise information security program, creation of an enterprise technology project management office, engaging in the leading edge of technology for utilization of government cloud services, and the addition of a modern Enterprise Architecture platform. Throughout 2017, OTS has been active in modernizing process based actions following industry accepted best practices under the Project Management Institute (PMI) and IT Infrastructure Library (ITIL) including implementing Project Management Office standards, Enterprise Governance such as influence groups for data asset governance and information systems, Agile software methodology, and operational standards around Incident and Problem Management. A summary of each of these initiatives can be found in Appendix 1.

While the consolidation efforts resulted in significant initial costs savings through improved resource utilization and leveraging economies of scale in technology procurement, the State is also facing a significant backlog in investment in information technology systems. Many State agencies are supporting their programs with systems that range from 10 to 40 years of age. With the rapid pace of technology evolution these systems are often based on technology that is outdated by multiple generations. Utilization of outdated technology leads to inefficient and ineffective program operations as well as introducing increased security risks with respect to safeguarding program operations and protecting the program data housed within the system.

The State currently faces a need for modernization of a myriad of outdated legacy technology systems. Unfortunately due to the large number of legacy systems and their associated complexity, this effort will require a significant financial investment over an extended period of time. The modernization process has already begun for agencies where sources of funding have been identified such as in the Louisiana

Department of Health and the Department of Children and Family Services where Federal technology incentive funding is available. Also the Division of Administration is poised to undertake completion of the LaGov statewide financial system deployment. However the legacy system modernization effort in many other agencies will rely heavily on State funding.

Similar to the approach of evaluating information technology systems, OTS also performed a broad review specific to the State's technology infrastructure. This infrastructure is comprised of the network, computing, security, and data storage hardware components which power the agency information technology systems. Commonly these components have a defined useful service life. Once a component exceeds the useful service life the risk of hardware failure begins to increase as well as the costs for equipment maintenance and the ability to apply equipment updates to maintain system performance and mitigate potential security vulnerabilities. As with the legacy information technology systems requiring modernization, the evaluation of the State technology infrastructure also revealed a backlog in investment with many of the components currently remaining in service beyond their useful life.

Applications and Infrastructure Review

Following House Concurrent Resolution 121 (HCR 121), OTS Service Owners evaluated the 1,359 applications and the 4,128 infrastructure devices/platforms under the Executive Branch cabinet agencies with the intention of ranking systems' risk based upon age, security risk, and platform supportability. Receiving a rank of 3.5 – 5.0 out of a 5 point scale would be reported in the findings as "Key Findings", of which the most critical platform per the Agencies' definition would be deemed "highest at risk" and highlighted under Key Findings. All of the remaining platforms that received a 3.5+ score are summarized in the "Remaining at Risk Platforms: By Agency" section. Similar information has also been provided by Departments under the direction of elected officials and institutions of Higher Education. This information has been provided in separate appendices. This self-assessment information has not been included in the above referenced scoring methodology or in the categorical presentation of costs or systems at risk.

Using this scoring, 11.5% of all applications in the applications inventory are deemed "high risk" to "maximum risk" as per the scoring methodology described in detail in the Methodology section of this document. In addition, 46% of all infrastructure is deemed either at End of Life (EOL) or End of Support (EOS).

Information Security: Threats Facing State Governments

All State and Local Government systems, devices, and infrastructure have become extremely desirable targets for cyber criminals. This appeal is highly attributed to Government organizations being unable to maintain aging infrastructure, afford investments in technology, and establish or maintain the staff, funding, and skillsets required to adequately protect and monitor their assets. Attackers see State and Local Governments as a low effort means to gain valuable citizen data such as SSNs, Driver License records, Health and Tax information to sell on the black markets.

An additional threat to Louisiana State and Local Government are cyberattacks by "Hacktivists" as a means of protesting. Unlike cyber criminals who attack systems to profit from data, hacktivists see themselves as fighting injustice and seek to disrupt government servers and services, deface websites, or worst case, compromise systems or users to gain access to data or email and released it online.

The final common threat scenario facing State Agencies are actions taken by attackers, typically to exploit an identified vulnerability in an internet facing web application, with the goal of using the State's

infrastructure to host a malicious file or link. This approach allows an attacker to significantly improve their efforts to compromise a larger corporate or financial institution simply by using the trusted infrastructure of the State.

Information Security: Understanding Current Posture

Unfortunately, Louisiana is not an exception to the previously mentioned threats.

On average, each month the State of Louisiana receives 32.4M unsolicited connections from unknown sources on the internet. These attempted connections are filtered out by the perimeter firewalls, but 2.6M of these attempts use legitimate paths and must be addressed by more robust solutions such as Intrusion Prevention Systems (IPS), Internet Proxies, and Web Application Firewalls (WAF).

An additional example of the ongoing threats to the State are in the 200,000 emails received every day. Typically, 8% of these emails contain malicious links, files, or attempt to infect a workstation used by a State worker. Although the actual compromise is prevented, each month approximately 68 workstations are attempted to be compromised by malicious files (computer viruses).

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DEFINITIONS

Definitions important to this review include:

- **Agency Relationship Manager (ARM)** – the OTS leadership role assigned to each Executive Branch agency that acts as an intermediary and representative of the Agency within OTS. ARMs are also responsible for the purchases of technology for their respective agency(ies)
- **Commercial off the Shelf (COTS)** – Refers to applications that are produced and sold by 3rd parties that focus on configuration rather than customization via custom development
- **End of Life (EOL)** – The condition/state of a product that has reached the end of its useful life and the vendor that owns the product ceases all support, marketing, and other life cycle management steps
- **End of Support (EOS)** – A condition/situation where a vendor ceases support for a product or service. When a product is in an "EOS" condition, critical updates such as security patches are no longer available
- **Enterprise Architecture (EA)** – The highly available and scalable modern platform implemented by OTS in 2017 that includes components to provision modern services and provide a platform to build modern applications; the EA platform exists of 7 components specifically a Data Warehouse, Enterprise Service Bus, Identity Access Management Tool, Master Data Management System, Electronic Document Management System, Business Rules Engine, and Consumer Communications system
- **Legacy System** – Outdated computer systems, programming languages or application software that are used instead of available upgraded versions. Legacy systems are high maintenance and may involve intricate patching and modifications
- **Line of Business (LOB)** – a division or subdivision focusing on producing a good or service. As applied to an Executive Branch agency, a line of business application or platform is a critical system used for the primary purpose of the Agency's mission
- **Service Owner** – The leadership role in OTS which is accountable for the delivery of a specific IT Service
- **Technology Debt** – the costs associated with ineffective or poorly designed information systems. Age, design, and coding standards are influencing factors for technology debt as well as the ongoing support requirements of said systems

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METHODOLOGY

Application Risk

Using a methodology to rank "at risk" symptoms, Executive Branch agencies' applications were evaluated on a series of seven key indicators to determine a composite risk value between zero and five as described in Table 1:

Table 1 – Application Risk Methodology

#	WHAT	DESCRIPTON
1.	Technical Rating	Is the Application past its technical lifespan?
2.	Functional Rating	Does the application functionally align with business requirements?
3.	Support Rating	Does the application have a viable support structure?
4.	Age	Ranking based on AGE; Older applications are higher risk.
5.	Essential Rating	How essential is the application to the Agency's mission?
6.	Exposure Rating	Is the application publically accessible?
7.	Restricted Data Rating	Does the application contain some form of restricted data?

The output from the rating were combined and bounded between zero and five to produce a Risk rating as displayed in Table 2:

Table 2 – Application Risk Scoring

Application Risk		RISK
	No Risk	0
	Low Risk	1, 1.5
	Medium Risk	2.0, 2.5, 3.0
	High Risk	3.5, 4.0
	Very High Risk	4.0, 4.5
	Maximum Risk	5

Data Center Operations Risk

DCO used a standard "Impact vs Likelihood" risk matrix, scaling it from 0 to 5 to align to the Application risk levels. The standard risk matrix measures both the impact of the item failing vs. the likelihood that it could fail.

As described in the Executive Summary, infrastructure has been reported in this response identifying the devices that are End of Life (EOL) and/or End of Support (EOS), which are inherently tied to the risk matrix below.

Table 3 – Infrastructure Risk Scoring

		A	B	C	D	E
		Negligible	Minor	Moderate	Significant	Severe
E	Very Likely	Low Med	Medium	Med Hi	High	High
D	Likely	Low	Low Med	Medium	Med Hi	High
C	Possible	Low	Low Med	Medium	Med Hi	Med Hi
B	Unlikely	Low	Low Med	Low Med	Medium	Med Hi
A	Very Unlikely	Low	Low	Low Med	Medium	Medium

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KEY FINDINGS SUMMARY

KEY FINDINGS: APPLICATIONS

This section goes into the at risk applications that scored a 3.5 or higher by agency that each respective agency has determined to be their **most critical**. While the most critical applications are highlighted in this section as determined by the respective agency, not all of the highest risk applications are presented in this section. The remaining highest at risk applications will be listed in the "Remaining at Risk Platforms: By Agency" section. It is noted that not all agencies within the Executive Branch have at risk applications deemed to be at a risk score greater than 3.5 on the at risk scale.

OTS orchestrated a review of the platforms under OTS by the Service Owners and of the 1,359 applications/platforms reviewed for HCR 121, **157 applications scored a 3.5 or higher on a 5 point scale**. The platforms identified were reviewed with the Agency Relationship Manager (ARM) for each agency and each ARM reviewed with the respective Agency their feedback on the criticality level, at risk score, funding mechanism, and the socio-economic impact of such application/platform failure. With this review, **63 of the 157 applications are deemed to be "most at risk"** and are listed in the Key Findings.

Of the 157 most at risk platforms, approximately 36% fell under the Department of Public Safety (DPS) with a count of 57 of 157 and the Department of Children and Family Services (DCFS) came in with the second highest percentage (approximately 12% or 19 of 157). However, Department of Education (DOE), Department of Wildlife and Fisheries (DWF), and Louisiana Department of Health (LDH) all had at risk applications in double digits. Note that upon review with the agencies, some of the applications' at risk scores were raised, lowered, or identified as retired including applications for Department of Education (DOE), Department of Transportation and Development (DOTD), Department of Wildlife and Fisheries (DWF), Office of Group Benefits (OGB), and DCFS.

Opportunities exist for all of these agencies to improve efficiencies by making quantum leaps in modernizing their platforms and to seek common platforms that provide common services across agencies. For example, the large volume of Lotus Notes applications within DPS is the majority of the findings for DPS and is clearly the disproportionate reason DPS has so many number of systems reported at risk. Another example of improved potential efficiency is the use of a modern COTS solution for correctional services for adults under the Department of Corrections and juveniles by the Office of Juvenile Justice as both populations have the same case management needs. Yet another example is the use of a Computer Aided Dispatch/Record Management System (CAD/RMS) for all areas of State law enforcement across Louisiana State Police, Department of Wildlife and Fisheries, and Department of Public Safety Police as they all have that common need.

For purposes of this assessment, the cost projections presented represent a one to one legacy system replacement. Opportunities for combining multiple legacy stand-alone systems into a single comprehensive solution or to leverage shared services across platforms or programs could potentially reduce the actual replacement cost for an individual legacy system.

The following tables and graphs detail the potential costs for modernizing the high risk applications identified in this response. The information presented will be for both an "all-in" cost summary as well as a focus on those systems identified in the "Key Findings" section.

Graph 1 – Percentage of At Risk Applications by Agency

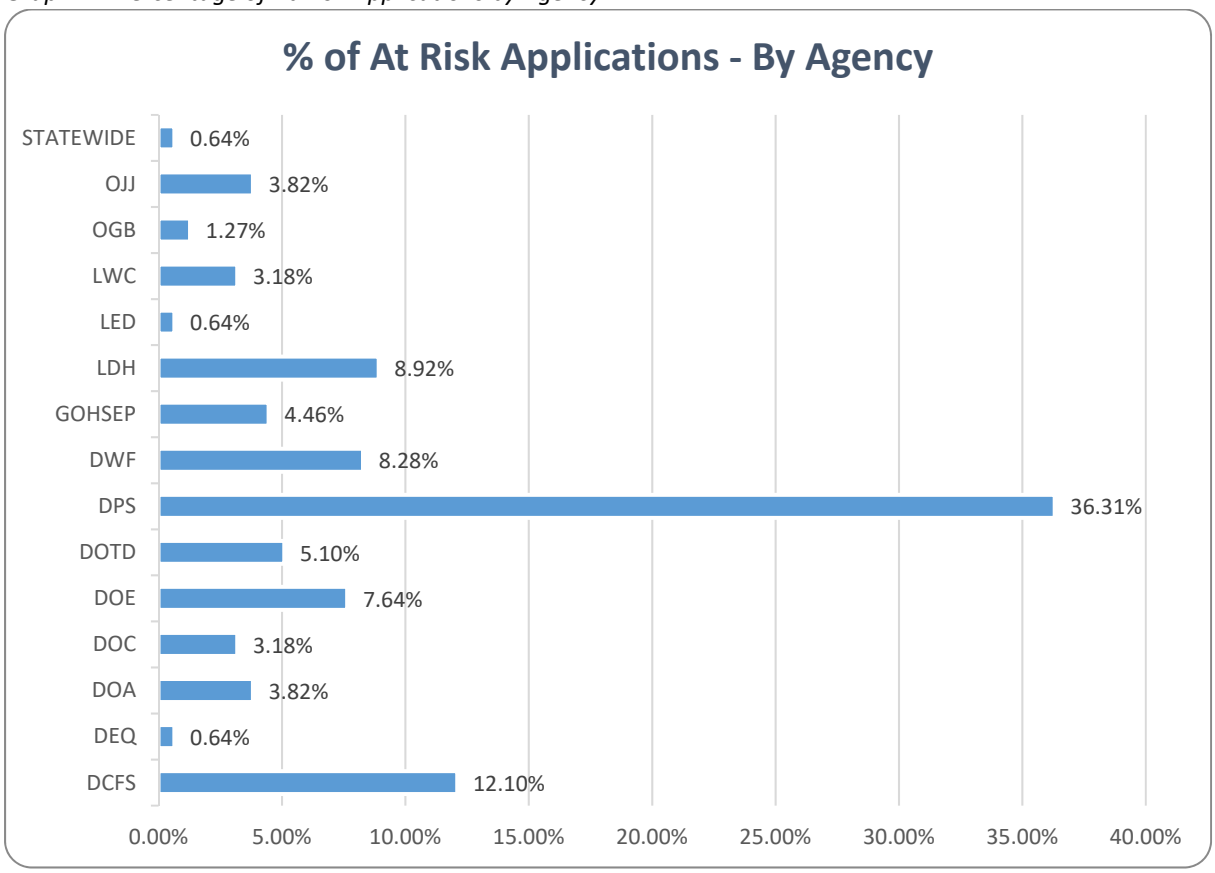

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Table 4 – At Risk Application Count and Total Replacement Costs Estimates

Agency	Application Count	Total Replacement Cost
DCFS	19	$393,000,000.00
LDH	14	$309,249,000.00
DPS	57	$114,300,000.00
STATEWIDE	1	$30,000,000.00
DOA	6	$21,500,000.00
DOE	12	$19,500,000.00
LWC	5	$17,100,000.00
DOTD	8	$12,098,000.00
DOC	5	$11,200,000.00
OGB	2	$11,000,000.00
DEQ	1	$10,000,000.00
DWF	13	$6,200,000.00
GOHSEP	7	$3,500,000.00
OJJ	6	$600,000.00
LED	1	$500,000.00
AppDM Total	**157**	**$959,747,000.00**

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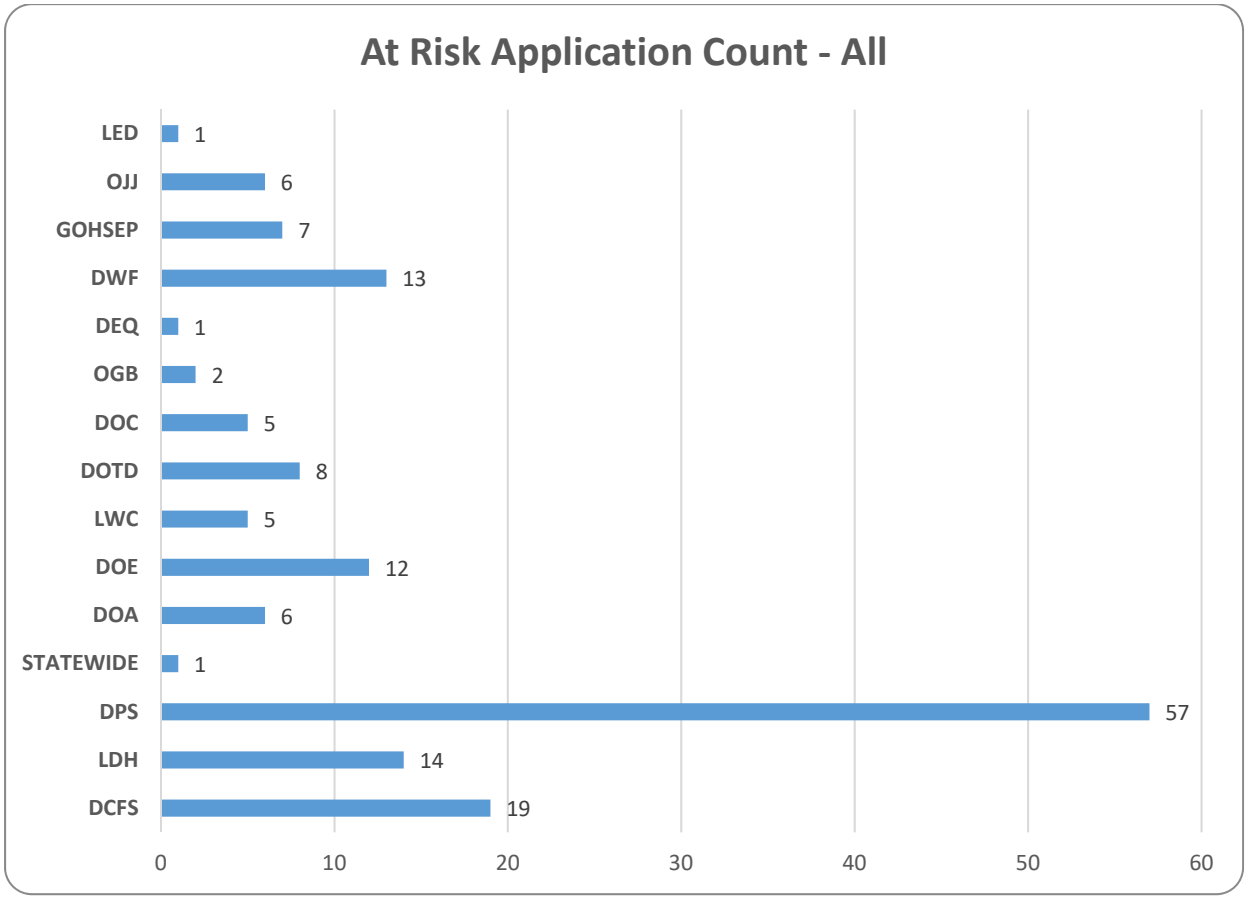
Graph 2 – At Risk Application Count by Agency



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Graph 3 – At Risk Application Total Replacement Costs Estimates by Agency

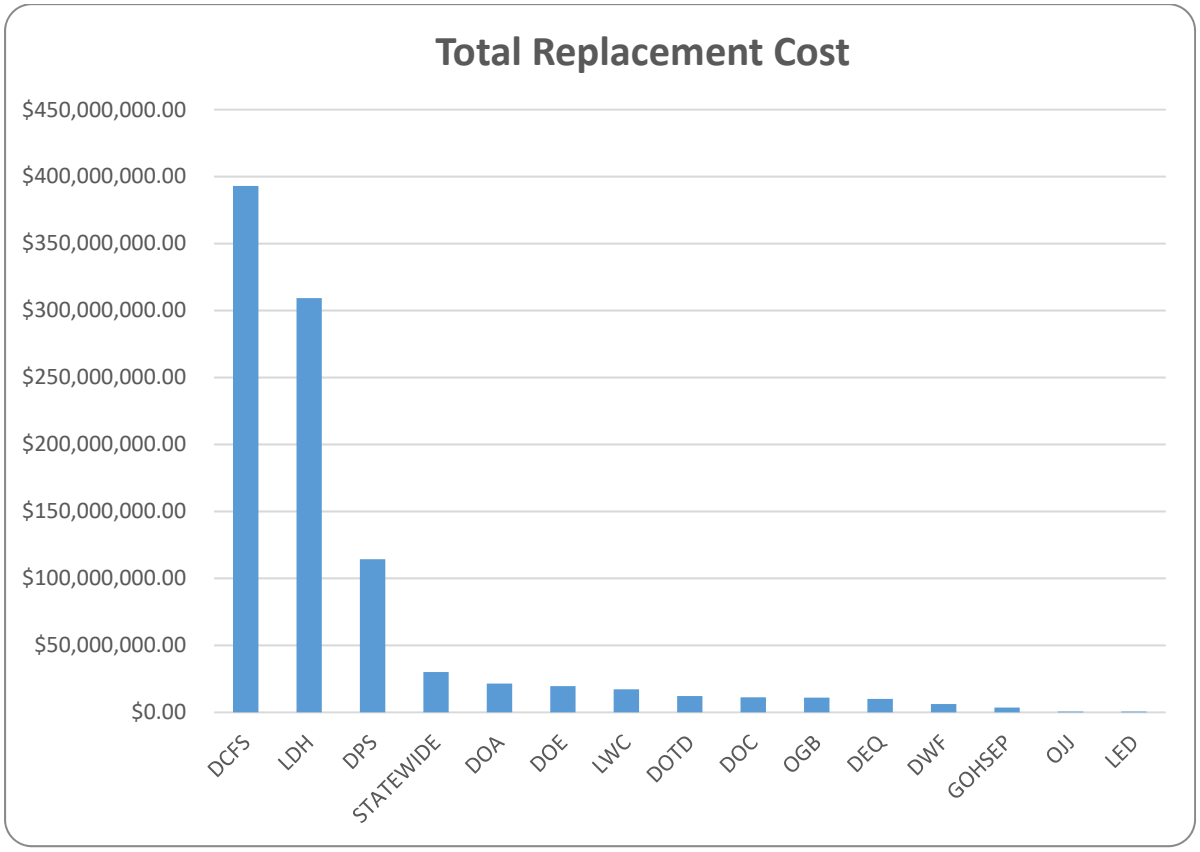

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Table 5 – Application Key Findings Count and Replacement Costs

Agency	Key Findings Count	Key Findings Replacement Cost
LDH	5	$306,000,000.00
DCFS	4	$280,000,000.00
DPS	9	$70,600,000.00
STATEWIDE	1	$30,000,000.00
DOE	8	$18,000,000.00
LWC	4	$17,000,000.00
DOA	3	$15,000,000.00
DOTD	4	$11,500,000.00
DOC	4	$11,100,000.00
OGB	2	$11,000,000.00
DEQ	1	$10,000,000.00
DWF	8	$5,300,000.00
GOHSEP	7	$3,500,000.00
LED	1	$500,000.00
OJJ	2	$200,000.00
AppDM Total	**63**	**$789,700,000.00**

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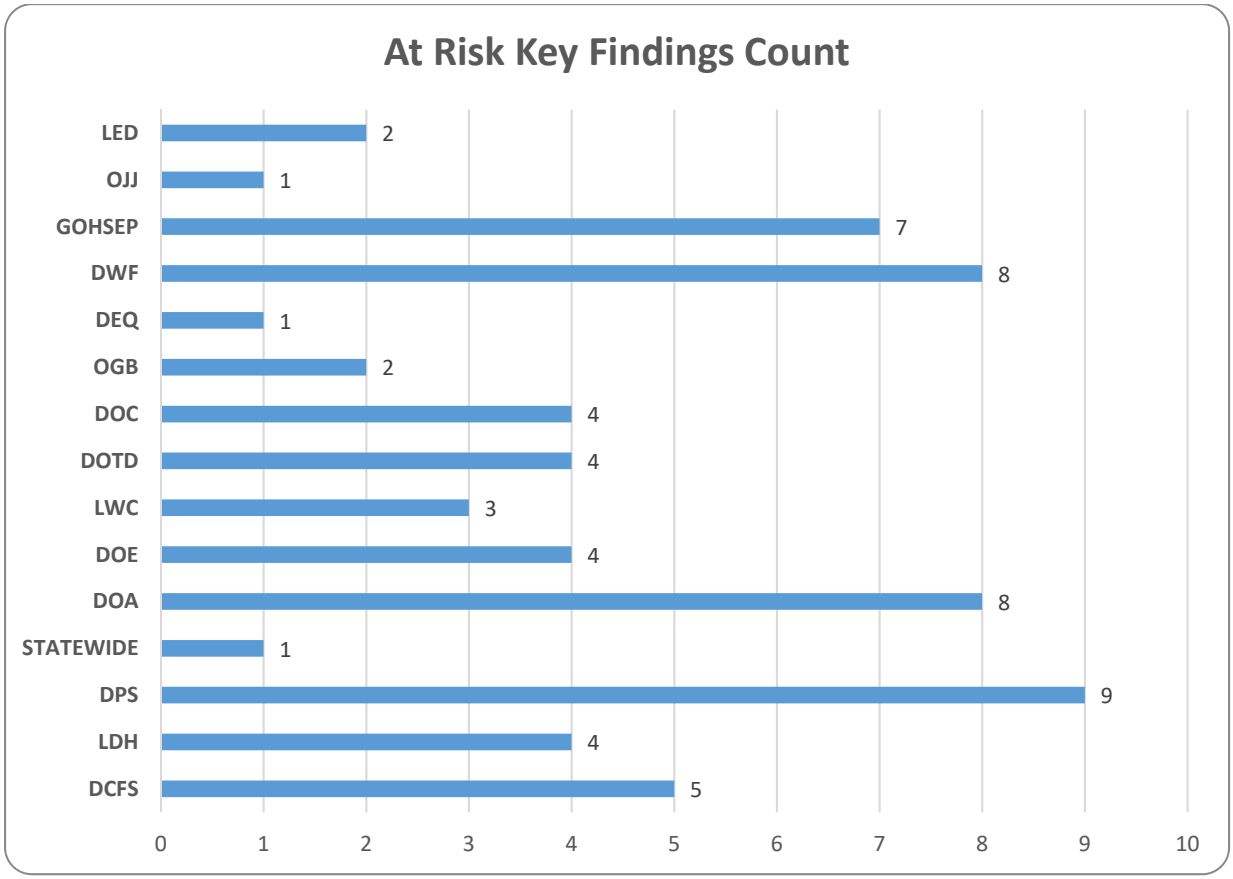
Graph 4 – At Risk Application Key Findings Count by Agency



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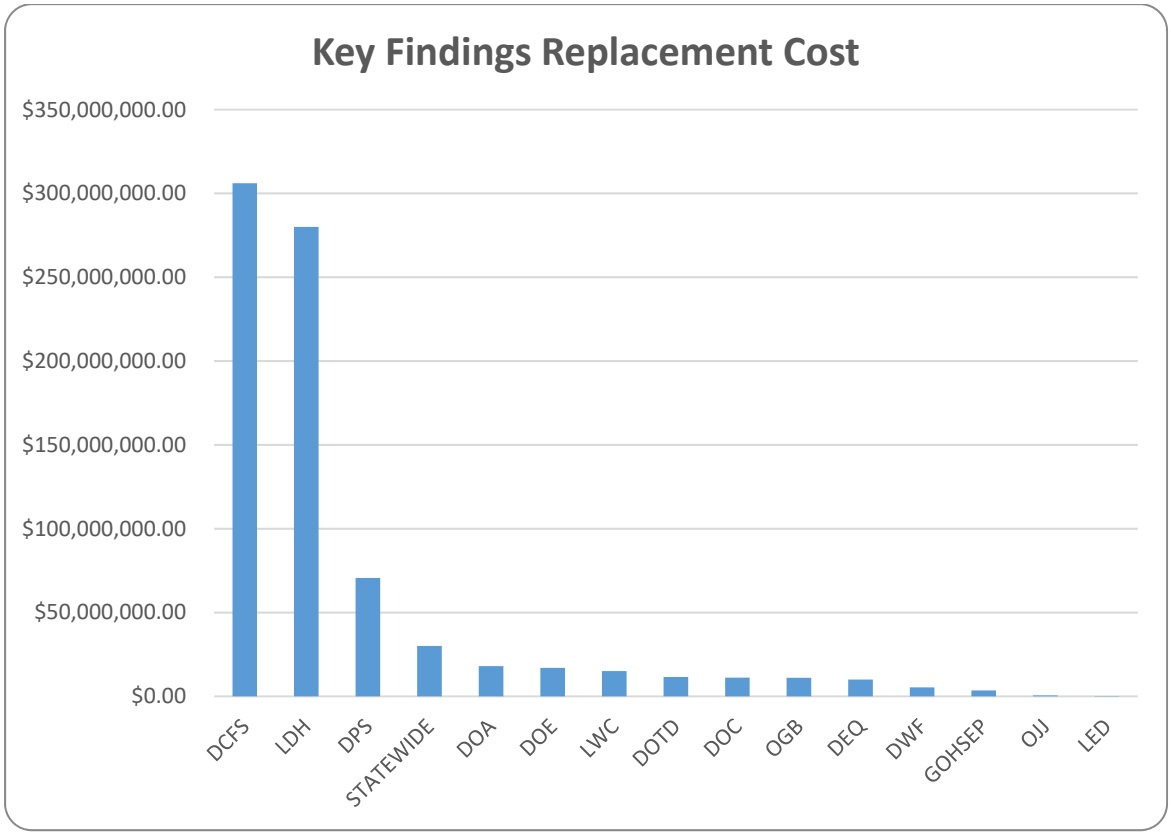
Graph 5 – At Risk Application Total Replacement Costs Estimates by Agency



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KEY FINDINGS: INFRASTRUCTURE

In context to this response, "infrastructure" refers to the collection of server hardware, virtual server systems, network equipment, and data center facilities and associated equipment used to provide computing and telecommunication services. This equipment, physical or virtual, and regardless of location, is inversely tied to the applications and architectures that comprise all of the IT services provided by OTS and consumed by constituent and State agency alike.

Within the last 12 months, OTS has successfully implemented a high-availability Enterprise Architecture (EA) which consists of modern, industry leading infrastructure from vendors Nutanix and VMWare. This design connects the data centers at the Information Services Building (ISB) and the data center at the Department of Public Safety (DPS) campus to the government cloud provided by Amazon Web Services and will provide applications that utilize the EA uptime percentages in the 99.99% range, an exceptional availability level by industry standards.

As modern as the EA is designed to be, there are many other opportunities for OTS to improve the posture of infrastructure. A prime example of a platform needing to be modernized is the Unisys Mainframe at DPS. Implemented in 1974 and platform upgraded in 1984, this platform is in its fourth decade of service (44 years) and is the core platform to one of the largest revenue generating agencies within State government directly responsible for $1.4B in annual revenue. In addition to revenue generation, core services provided by this platform include Drivers Licenses, Vehicle Registration, and Suspension & Reinstatement of driving privileges for registered drivers within the State and with 3.4 million registered drivers in Louisiana out of 4.5 million citizens, this one platform directly impacts approximately 73% of the State's population. Due to the age of the platform, there are less than 10 known potential replacements in the United States and its rarity makes replacing the system an undeterminable task, both costs and time wise making the presumption that the State could procure a replacement. The costs for replacing this system can only be estimated based on the historical costs of procuring the current system and with such unknown variables, the replacement cost estimate in Table 5 – Infrastructure Modernization Cost Estimates is a "best guess" exercise.

The following key findings for infrastructure will be broken down by department under OTS Data Center Operations (DCO). It is important to distinguish that operating system software versions that run on infrastructure platforms are different than the hardware infrastructure that supports the software. Because of this one will see in the following details that a product can have a separate End of Support (EOS) date from an End of Life (EOL) date that is typically reserved for hardware assets, physical or virtual. Please refer to the Definitions section on page 6 of the response for a detailed description of EOS and EOL.

The infrastructure key findings are broken down by these DCO departments:

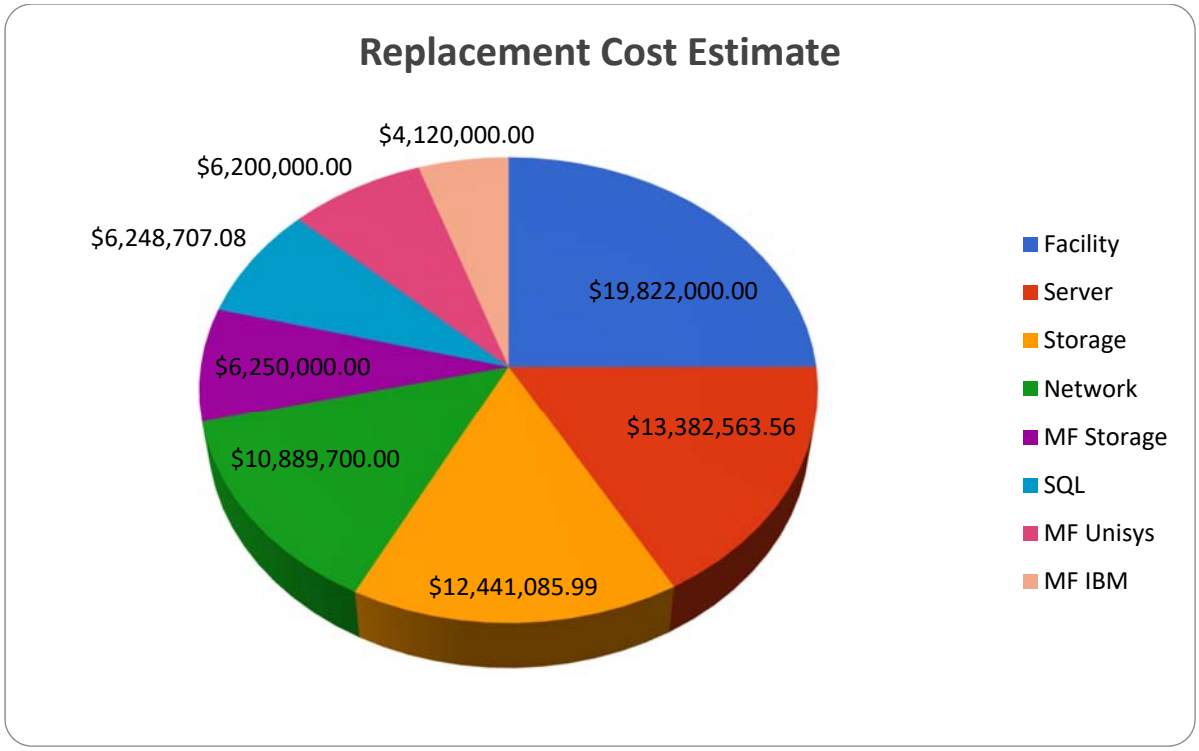
- Server Infrastructure
- Network Infrastructure
- Storage Infrastructure
- SQL Database Infrastructure
- Data Center Facility Infrastructure

- Mainframe & Mainframe Storage Infrastructure
    - Note: Mainframes and Mainframe Storage costs are identified separately in the modernization costs estimates (Table 5) but grouped into a single key finding

Table 6 – Infrastructure Modernization Cost Estimates by Agency

Department	Item Count	Replacement Cost
Facility	70	$19,822,000.00
Server	1042	$13,382,563.56
Storage	579	$12,441,085.99
Network	2130	$10,889,700.00
MF Storage	19	$6,250,000.00
SQL	284	$6,248,707.08
MF Unisys	1	$6,200,000.00
MF IBM	3	$4,120,000.00
DCO Total	**4128**	**$79,354,056.63**

Graph 6 – Infrastructure Replacement Cost Estimate



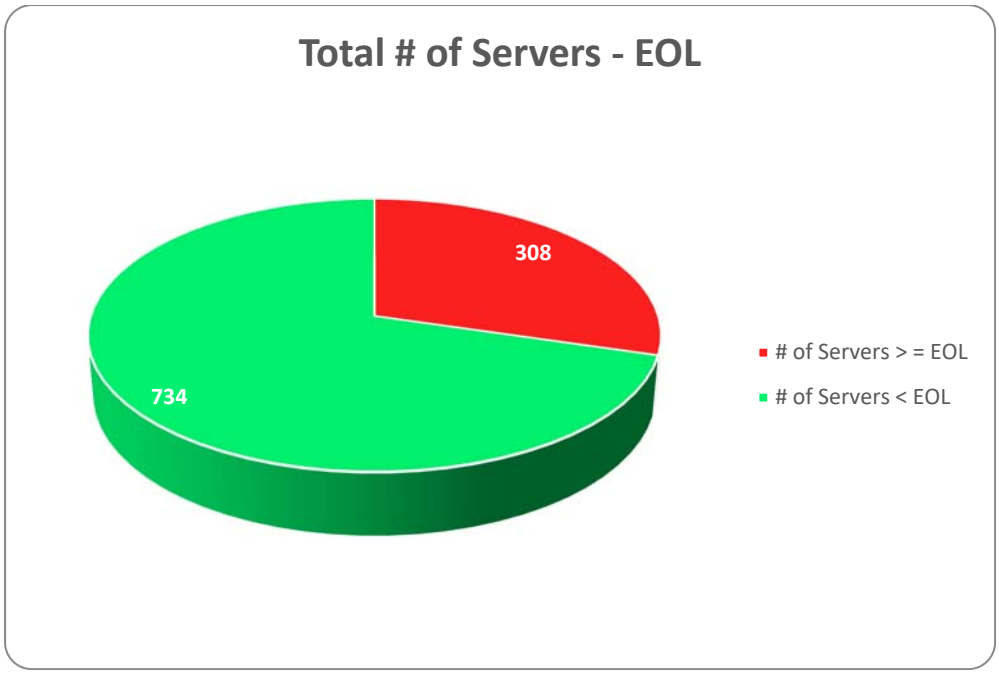
Server Infrastructure

Greater than 50% of the server infrastructure is at or beyond EOS, which poses a significant risk. An enterprise Virtual Server environment has been created that has failover capability between data centers, has defined backup and recovery procedures, and meets all the security requirements for various types of restricted data. Legacy hardware is prioritized and migrated into this managed environment, providing a centralized and streamlined approach to handling aging servers while leveraging savings through economies of scale in contrast to refreshing federated environments. The new environment is also modular, meaning that it can scale up and down seamlessly as customer demands require and the cost stays mainly linear. The OTS server roadmap also plans to link this virtual environment to cloud provided servers through a seamless integration, bolstering off-site and cost-effective disaster recovery options. OTS is working with a major cloud provider currently to test and verify the strategy and OTS is targeting to have this available to customers before the end of the 2018 calendar year.

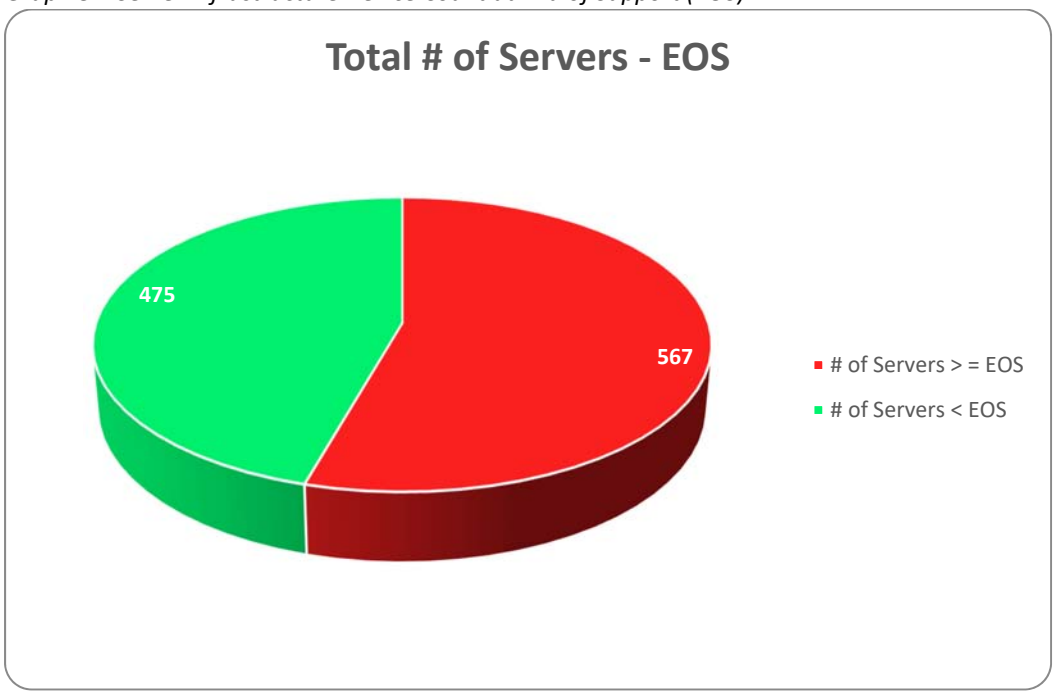
Table 7 – Server Infrastructure Statistics

Item	Statistic
# of Servers	1042
# of Servers > = EOL	308
# of Servers < EOL	734
% of Servers > = EOL	29.56%
% of Servers < EOL	70.44%
# of Servers > = EOS	567
# of Servers < EOS	475
% of Servers > = EOS	54.41%
% of Servers < EOS	45.59%

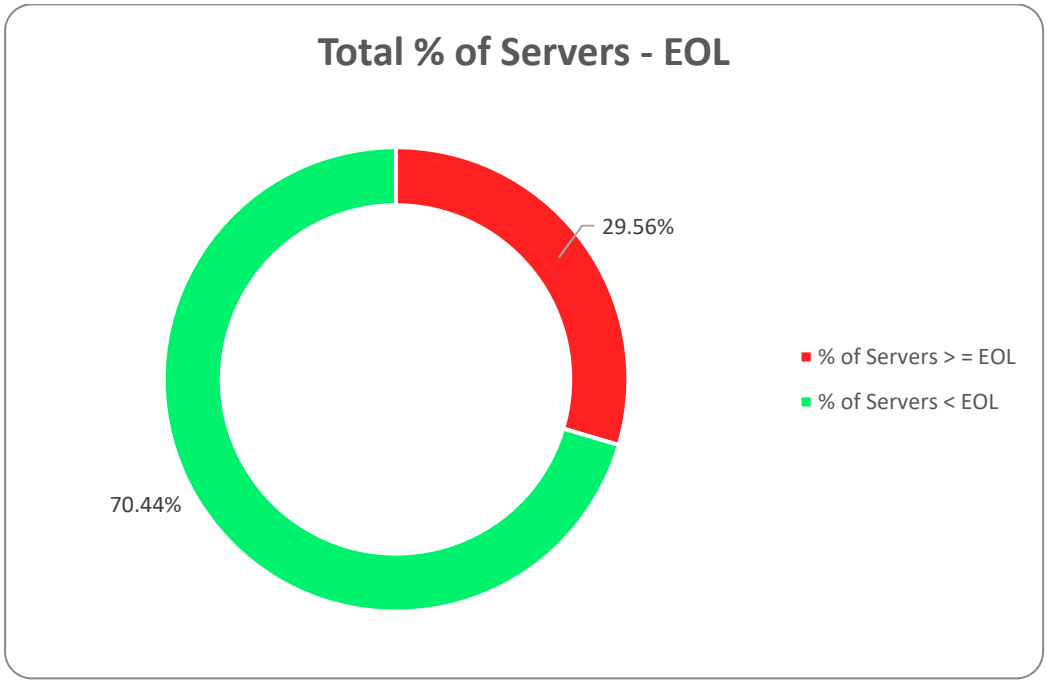
Graph 7 – Server Infrastructure Device Count at End of Life (EOL)



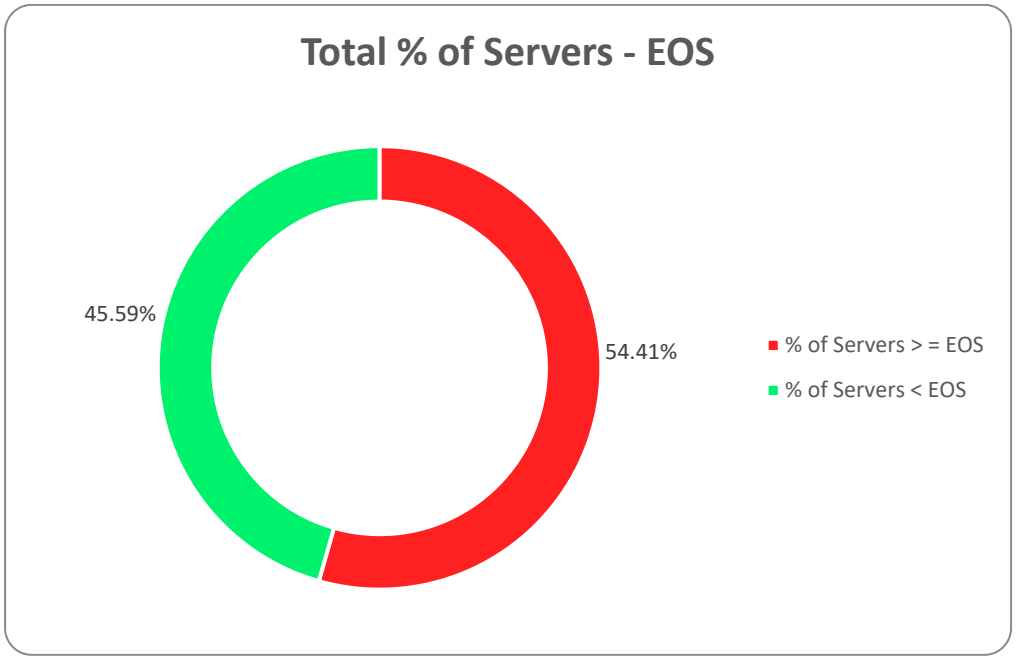
Graph 8 – Server Infrastructure Device Count at End of Support (EOS)



Graph 9 – Server Infrastructure Percentages at End of Life (EOL)



Graph 10 – Server Infrastructure Percentages at End of Support (EOS)



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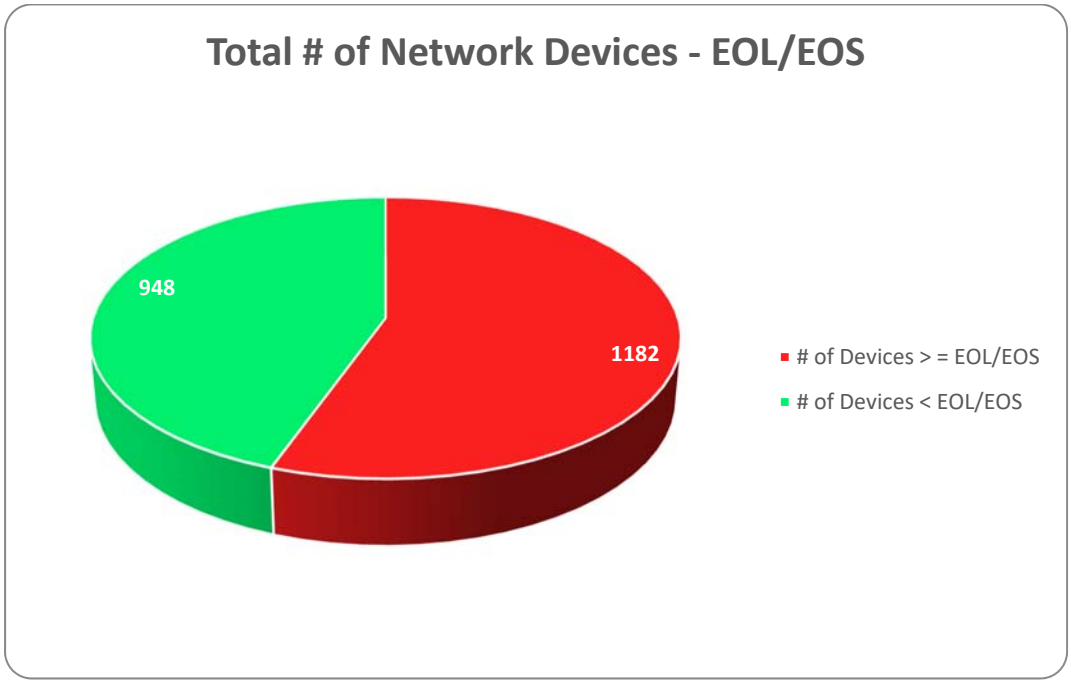
Network Infrastructure

Network components power the State's ability to securely access information technology systems and services as well supporting business transactions and exchanging information internally, with external government partners, private sector organizations, and constituents. Similar to the server infrastructure, OTS managed network/telecommunication devices are also in a state where there are greater than 50% of devices at or beyond their EOL. Historically, each agency purchased their own leased circuits and equipment to connect their work sites and data center presence to the OTS backbone. OTS now manages all of those network components and has a number of efforts under way to significantly reduce the overall State spend on equipment, maintenance and leased services. Currently major efforts are underway to replace and standardize equipment across all in-scope customers. Now that OTS owns the network end-to-end a streamlining effort is also underway to simplify and secure the network to reduce overall network spend and improve performance and reliability.

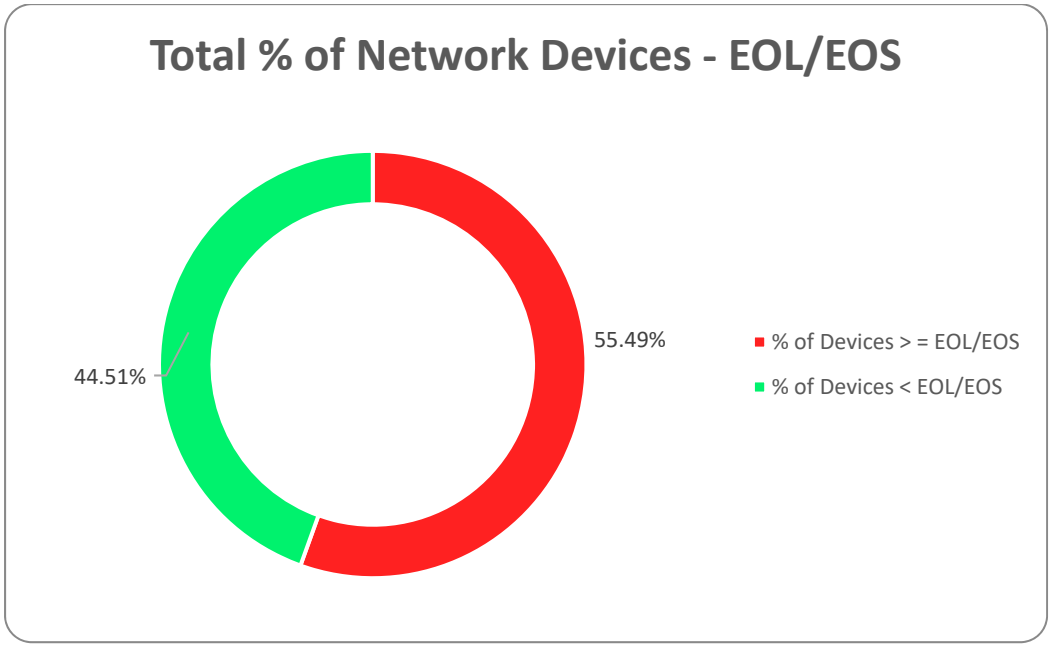
Table 8 – Network Infrastructure Statistics

Item	Statistic
# of Devices	2130
# of Devices > = EOL/EOS	1182
# of Devices < EOL/EOS	948
% of Devices > = EOL/EOS	55.49%
% of Devices < EOL/EOS	44.51%

Graph 11 – Network Infrastructure Device Count at End of Life/End of Support (EOL/EOS)



Graph 12 – Network Infrastructure Percentages at End of Life/End of Support (EOL/EOS)



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Storage Infrastructure

Storage infrastructure components securely host the vast majority of all information captured by State government in electronic format. This includes static content such as reports, emails, and constituent documentation, to dynamic content such as the information produced within the State departments' information technology systems. Storage systems are also vital in providing information integrity for disaster recovery capabilities associated with these systems. OTS has built an enterprise consolidated storage system to back the consolidated server environment. As prioritized hardware is migrated to the new server environment, data backing those servers is migrated into the storage environment in tandem. The environment provides two (2) live copies of data at each data center plus two (2) sets of backups to protect against data loss and keep data integrity. Fine grained controls allow storage to run on different speed tiers as required, providing the best balance of performance and price. OTS is finalizing a low cost line of service for archival storage that will provide cheaper, more efficient means of keeps long term, low utilization data such as legal holds or legacy retention schedule data at a fraction of the price of live storage. Once cloud connectivity is available for service migrations, OTS will also have the ability to bulk move data at high speeds to geographically disparate locations as required for disaster recovery and resiliency for customer that have those requirements.

Table 9 – Storage Infrastructure Statistics

Item	Statistic
# of Storage Devices	579
# of Storage Devices > = EOL	230
# of Storage Devices < EOL	349
% of Storage Devices > = EOL	39.72%
% of Storage Devices < EOL	60.28%
# of Storage Devices > = EOS	277
# of Storage Devices < EOS	302
% of Storage Devices > = EOS	47.84%
% of Storage Devices < EOS	52.16%

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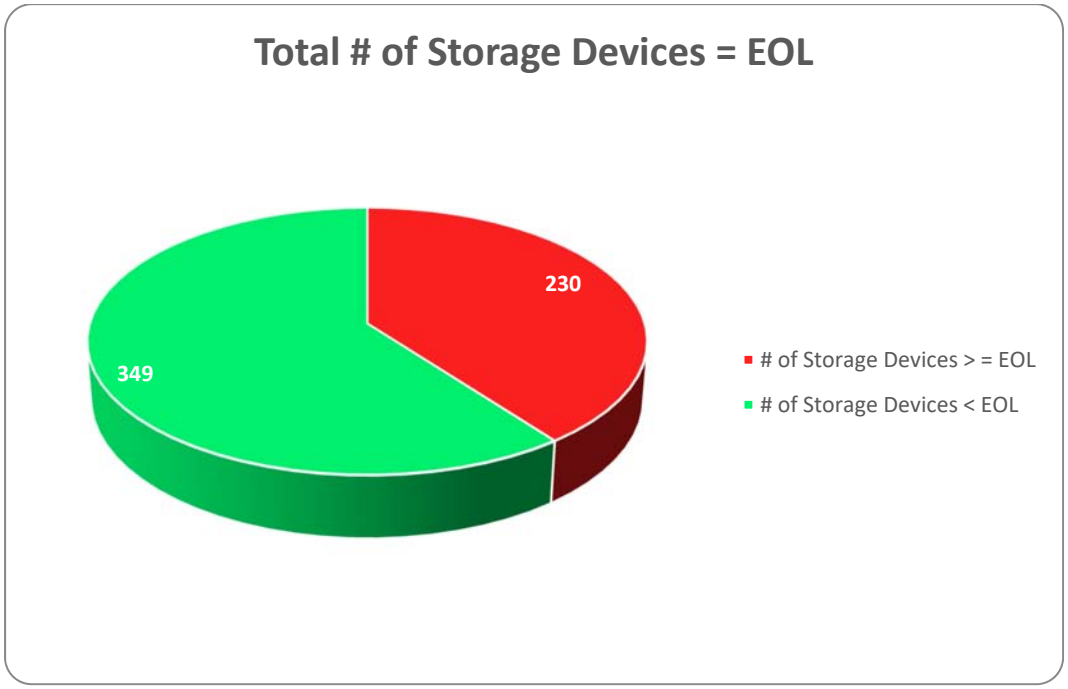
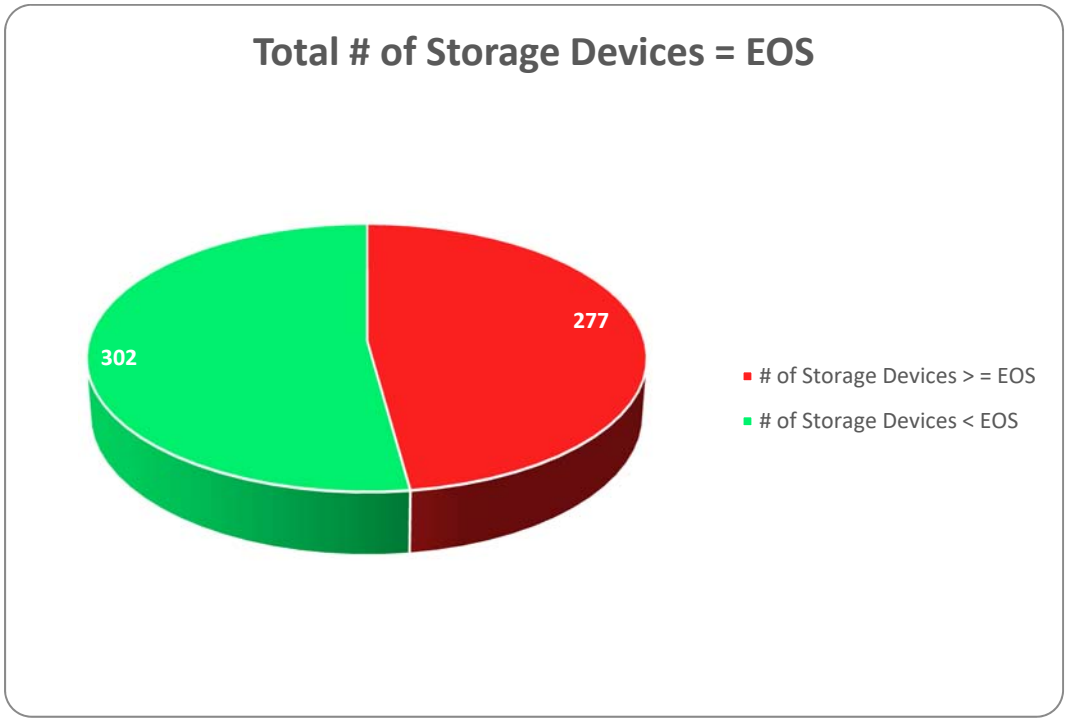
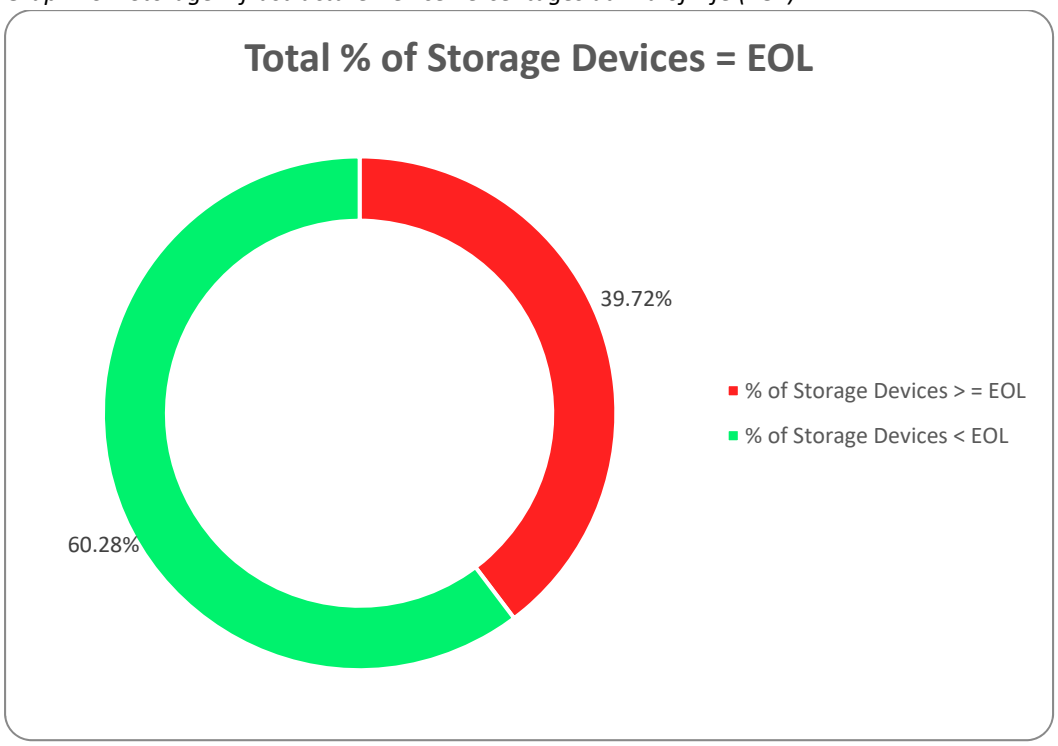
Graph 13 – Storage Infrastructure Device Count at End of Life (EOL)



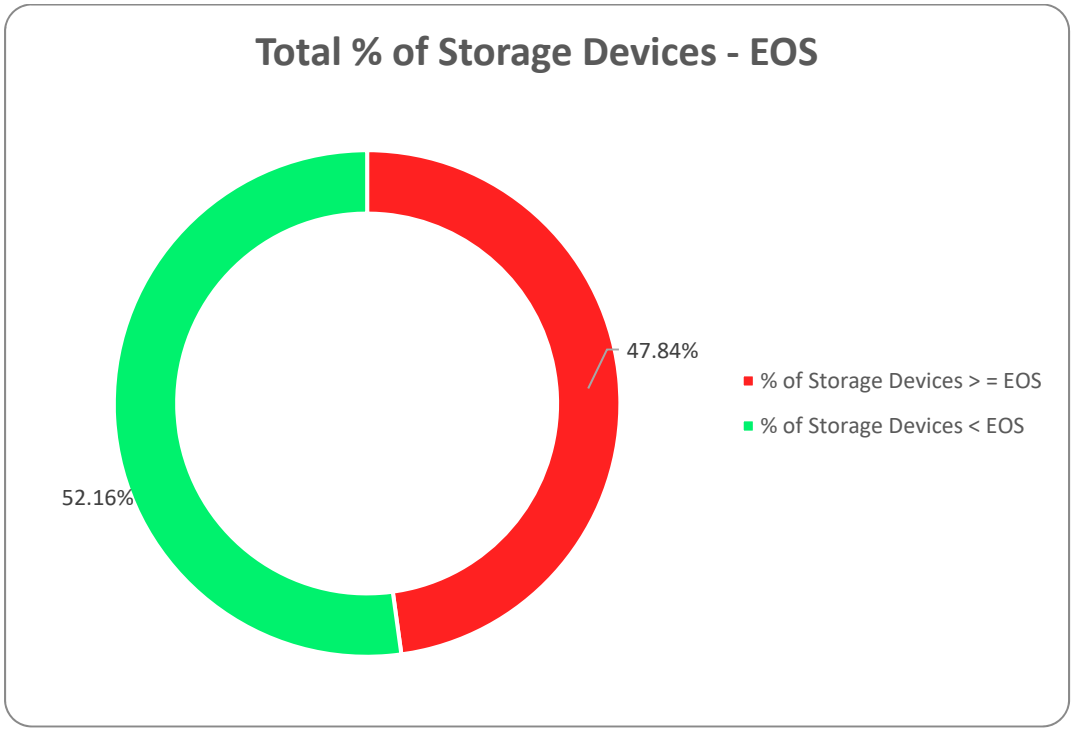
Graph 14 – Storage Infrastructure Device Count at End of Support (EOS)



Graph 15 – Storage Infrastructure Device Percentages at End of Life (EOL)



Graph 16 – Storage Infrastructure Device Percentages at End of Support (EOS)



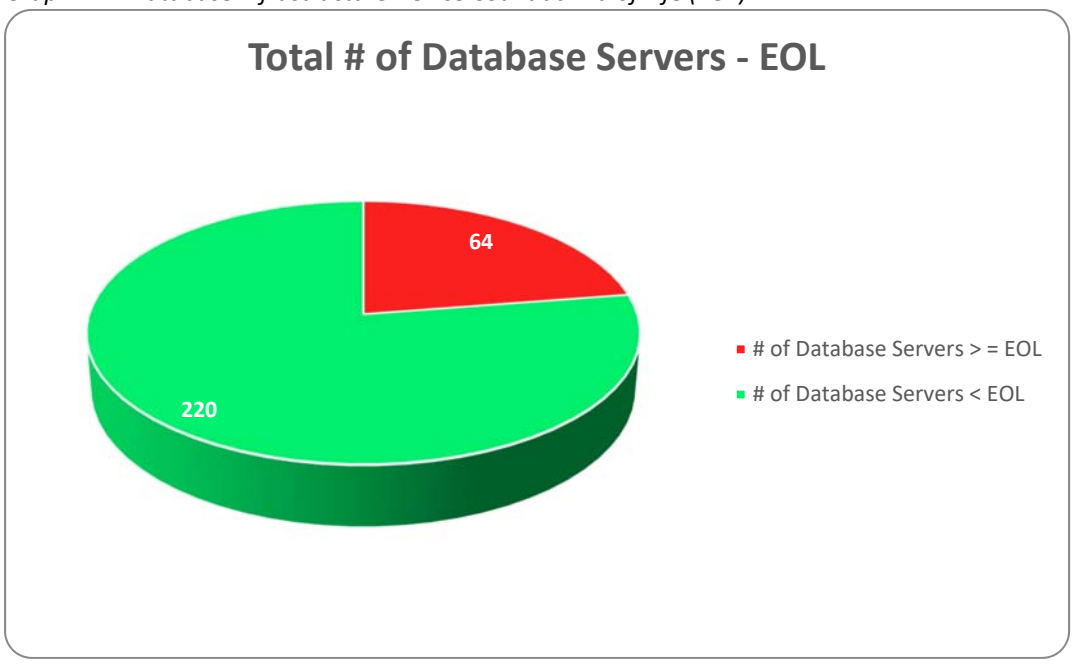
Database Infrastructure

Databases comprise the primary way to store large relations sets of data and back almost every software application. OTS leverages the new enterprise storage and server infrastructure (along with all of their benefits) to power a consolidated database platform. Currently there are a high percentage of database servers that are at or past their EOL and queued to be migrated into the OTS platform. This number can be skewed, because although there are comparatively few database servers in the new consolidated environment, these servers are very dense and powerful and can run more databases per server than the vast majority of existing servers to be migrated. This helps further reduce cost and streamline support functions. As this environment is based on the server and storage environment, legacy database servers are prioritized and migrated as funding and time permits.

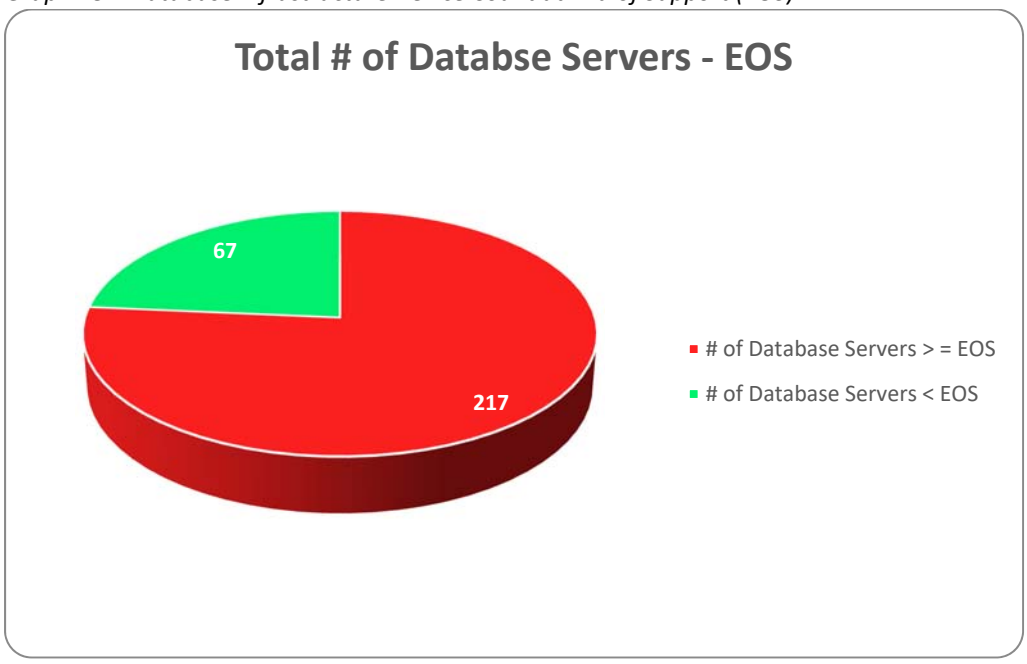
Table 10 – SQL Database Infrastructure Statistics

Item	Statistic
# of Database Servers	284
# of Database Servers > = EOL	64
# of Database Servers < EOL	220
% of Database Servers > = EOL	22.54%
% of Database Servers < EOL	77.46%
# of Database Servers > = EOS	217
# of Database Servers < EOS	67
% of Database Servers > = EOS	76.41%
% of Database Servers < EOS	23.59%

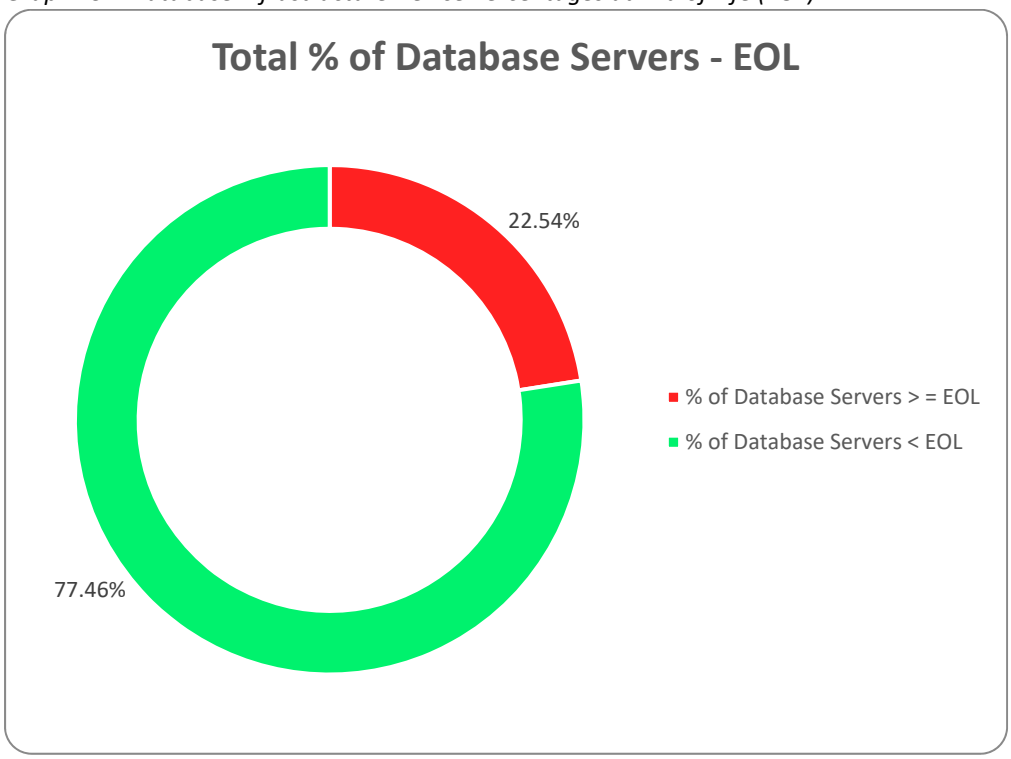
Graph 17 – Database Infrastructure Device Count at End of Life (EOL)



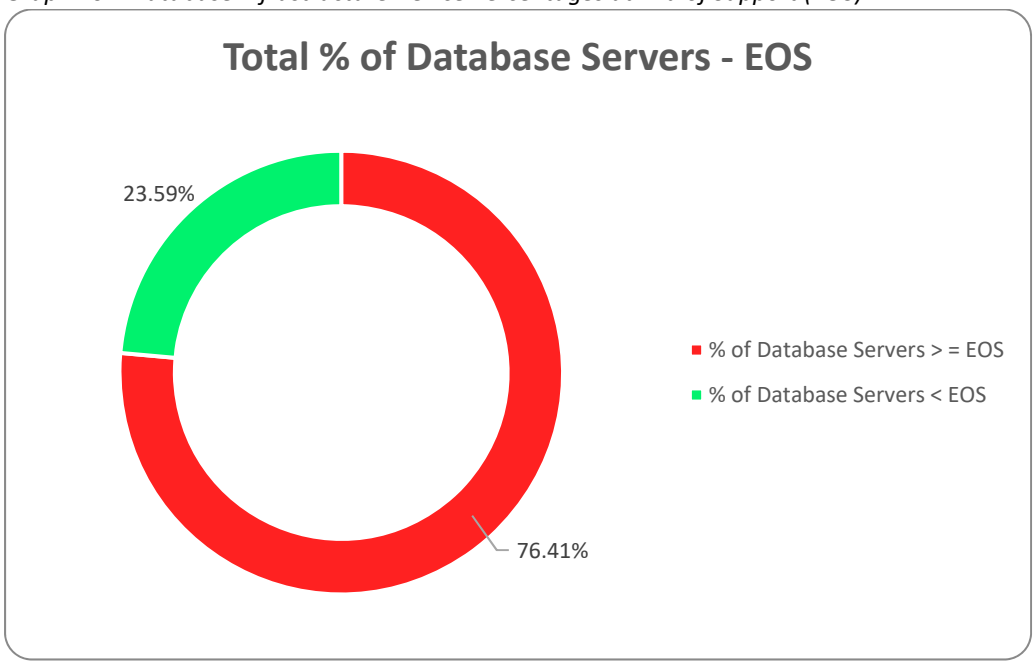
Graph 18 – Database Infrastructure Device Count at End of Support (EOS)



Graph 19 – Database Infrastructure Device Percentages at End of Life (EOL)



Graph 20 – Database Infrastructure Device Percentages at End of Support (EOS)



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Data Center Facility Infrastructure

OTS operates two primary data centers and utilizes third party providers for additional geographically disparate data center space as well as cloud services for virtual infrastructure. The two primary data centers provide ample redundancy in the form of multiple main power feeds (from separate utility sub-stations), multiple UPS units in parallel, and three primary generators that can operate in parallel at each location. Security guards are housed at each location, and central scan card access is required for each section of each facility independently. All facilities equipment undergoes regular scheduled maintenance and testing with generators being run weekly and extended run tests monthly. UPS batteries are live monitored and replaced every three (3) years or earlier as required. All failover to UPS and generator are switched automatically in real time, and both generator and chiller sets automatically shed and balance based on load. The primary State data centers have fuel priority in an emergency and underground fuel tanks (10,000 gallon primary with dual 2,000 gallon day tanks) to run for up to a week depending on load.

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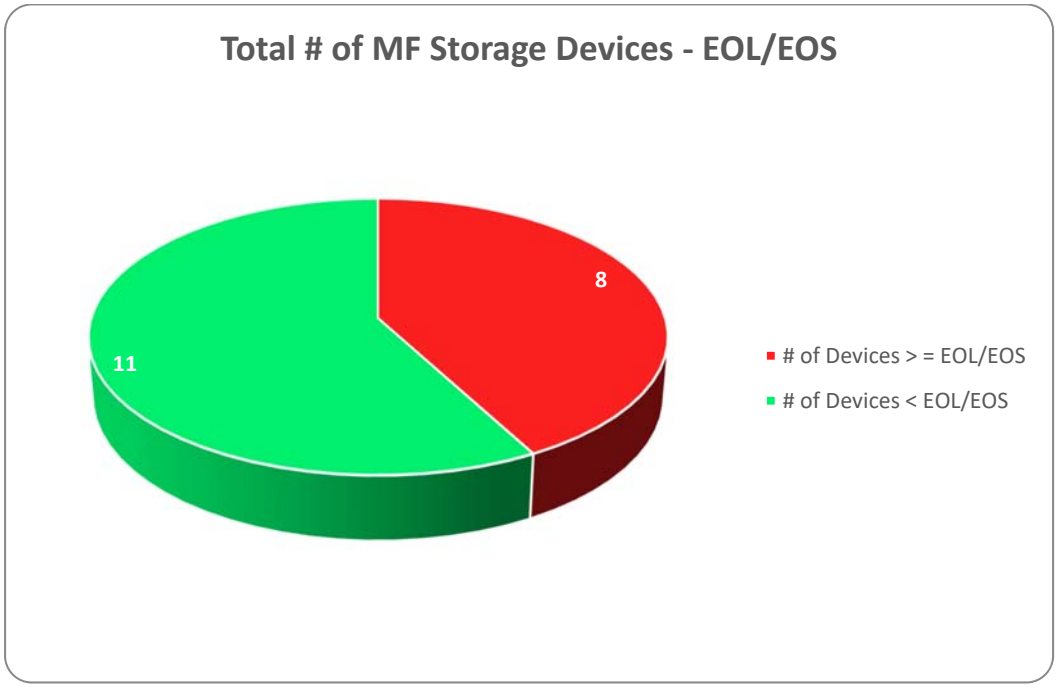
Mainframe & Mainframe Storage

A number of crucial legacy platforms depend on mainframes including major applications for DOA, DPS, DOTD, LWC, LDH, DCFS, and others. OTS has actively been consolidating and decommissioning aging mainframes and attached storage into a new dual IBM mainframe enterprise environment with failover capability between the primary data centers. As of today, almost all IBM environments have been converted off of legacy equipment and into OTS lines of service and the corresponding environments. The primary outstanding hardware at this point is the Unisys Mainframe and supporting equipment. Unisys has dwindled aggressively as IBM has become the standard, and hardware and support have become less available and increasingly expensive. There is currently a modernization project to rewrite the Unisys applications to get them off of this hardware rather than refresh the underlying infrastructure. Once that project is completed by the applications group and put into production, the Unisys will be sunset and OTS will have all mainframe customers on the same standard across consolidated agencies.

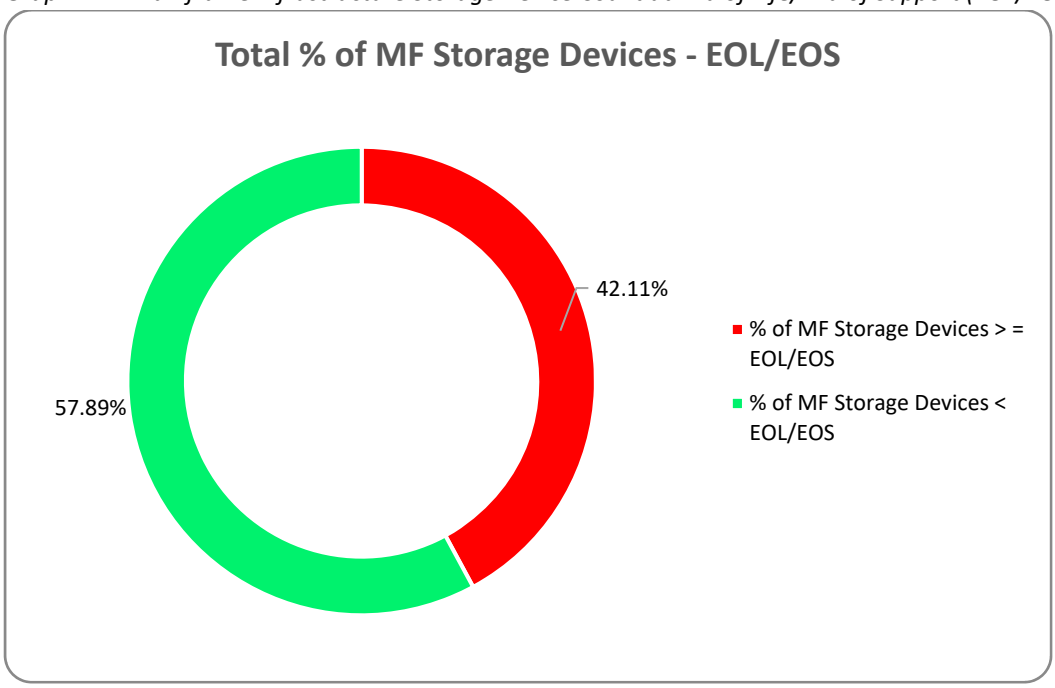
Table 11 – SQL Database Infrastructure Statistics

Item	Statistic
Total # of MF Storage Devices	19
Total # of MF Storage Devices at EOL/Out of Support	8
Total # of MF Storage Devices within Support	11
Total # of MF Storage Devices at EOL/Out of Support	42.11%
Total # of MF Storage Devices within Support	57.89%

Graph 21 – Mainframe Infrastructure Storage Device Count at End of Life/End of Support (EOL/EOS)



Graph 22 – Mainframe Infrastructure Storage Device Count at End of Life/End of Support (EOL/EOS)



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KEY FINDINGS: INFORMATION SECURITY

Brief Explanation

State Agencies are trusted with Confidential and Restricted information, including, but not limited to:

- **Criminal Justice Information** (CJI)
- **Federal Tax Information** (FTI)
- **Protected Health Information** (PHI)
- **Payment Card Information** (PCI)
- **Social Security Information** (SSI)
- **Personally Identifiable Information** (PII)

Agencies must continue to acknowledge their responsibility and take the actions required to protect that information. The State has adopted an Information Security Strategy intended to:

- Align information security with operational strategy;
- Comply with applicable legal and regulatory requirements;
- Achieve industry standards; to manage, monitor, and mitigate information security risks and incidents;
- Optimize information security investments;
- Manage information security resources efficiently; and to
- Monitor the ongoing effectiveness of the State's Information Security Program.

Potential Negative Impact

Failure to secure Confidential and Restricted data will result in:

- Denied access to Federal Information, such as: CJI, FTI, CMS Data, SSA, etc. resulting in severe impact to an Agency's primary public service. Examples include, but not limited to:
    - Department of Public Safety (DPS)
        - State Police (LSP)
        - Office of Motor Vehicles (OMV)
    - Department of Revenue (LDR)
        - State Tax Collection
    - Department of Health (LDH)
        - Office of Medicaid
        - Office of Public Health
    - Department of Child and Family Services (DCFS)
        - Office of Child Support Enforcement (CSE)
        - Office of Economic Stability (ES)
    - Workforce Commissioner (LWC)
        - Office of Unemployment Insurance (UI)
        - Office of Worker Compensations (OWC)
- The State potentially receives Penalties, Sanctions, and operational expenses resulting from breach notification requirements.
- Loss of confidence from public, businesses, and partners.

Recommended Priorities

In order to continue the necessary improvements to the State's security posture the office of technology services strongly recommends investment in the following areas:

- Security Information and Event Monitoring (SIEM)
  - Insure all Agency Applications and Infrastructure are generating the appropriate events.
  - Insure all Events are centrally collected and monitored by the Information Security Team.
- Static Code Analysis for Application Development
  - Require all modernized applications be security tested (Static Code Analysis) during the development process.
- Multi-Factor Authentication Options for Citizens (MFA)
  - Make available for all public services (internet facing applications)
- File Integrity Monitoring (FIM)
  - Utilize this technology to address risk associated with cloud or legacy platforms.
- Database Activity Monitoring (DAM)
  - Addresses the risk of database level activities (addresses monitoring risk of storing or sharing restricted information).
- Third Party Risk Assessments for all State Agencies
  - Require on-going (bi-annual) risk assessments for all state agencies.
  - Coordination of Risk Assessment activities, findings, and remediation to be managed by the State's Information Security Team (IST)

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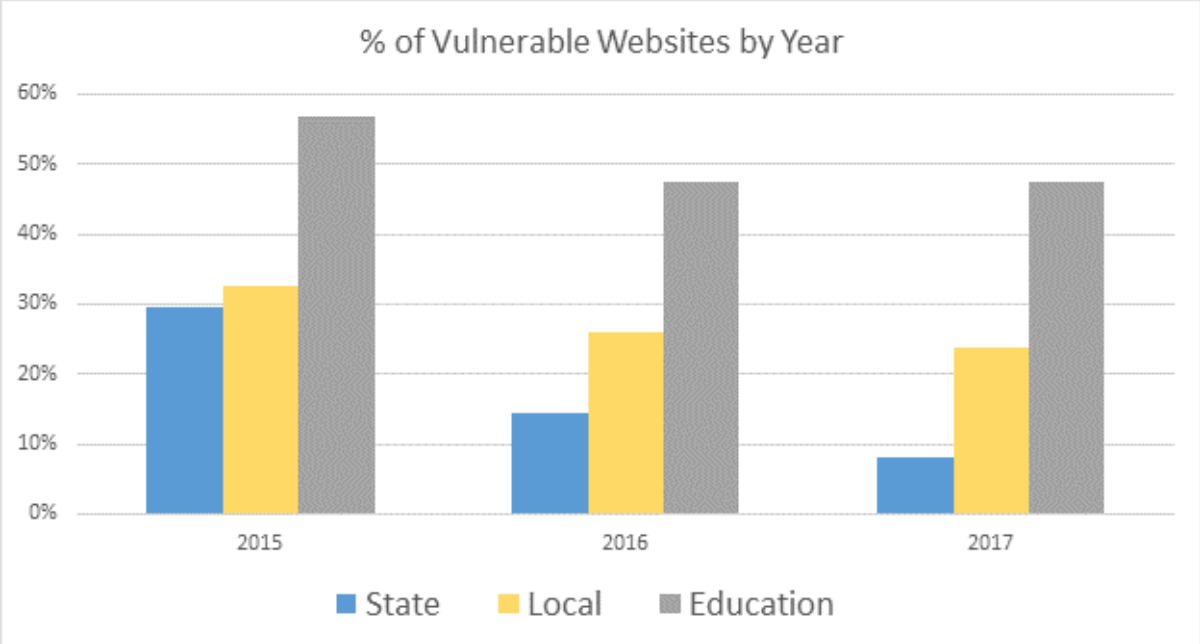
Vulnerability Management

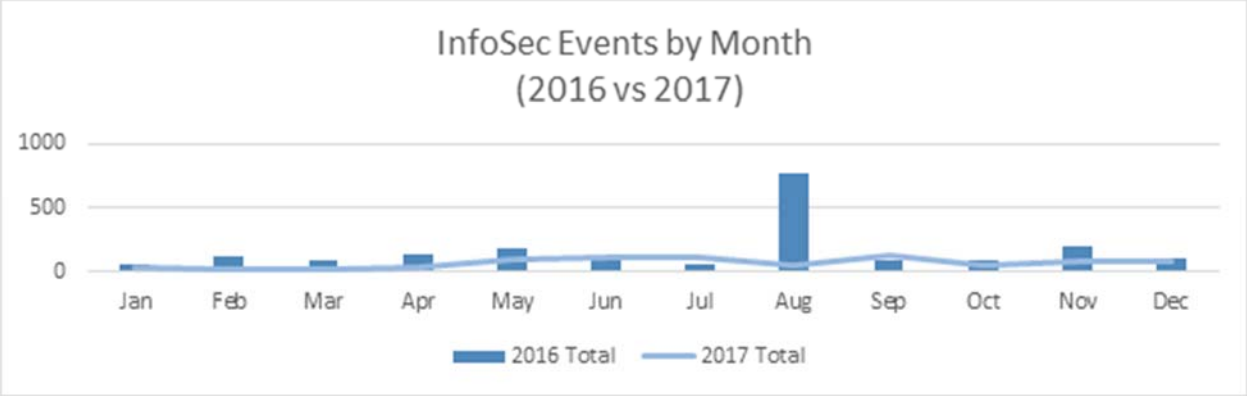
# of Public Websites Scanned	2015	2016	2017
State	54	49	45
Local	46	27	28
Education	37	33	21
Total	137	109	94

% of Websites found to be Vulnerable	2015	2016	2017
State	30%	14%	8%
Local	33%	26%	24%
Education	57%	48%	47%



Security Event Monitoring

	2016	2017	Variance
Total	2001	799	-60%
In-Scope Agencies	561	327	-42%
Out-Scope Agencies	1440	472	-67%



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KEY FINDINGS: AT RISK PLATFORMS BY AGENCY

Department of Children and Family Services (DCFS)

Key System: Louisiana Automated Support Enforcement System (LASES): Score = 5

Description: Designed to implement the Title IV-D program to support the Child Support program for the State of Louisiana. LASES is a comprehensive case management system that maintains data on all child support cases and performs automated functions pertaining to locating non-custodial parents, establishing paternity and child/medical support orders, and enforcing/collecting, distributing support payments.

Social Impact: DCFS currently has 281,429 active cases serving 562,858 constituents and their children who rely on these services. Failure of the LASES system would result in the State being in non-compliance and could result in the loss of Federal incentive dollars from Federal partners in addition to the child support payments not being paid to non-FITAP and non-KCSP payees.

Economic Impact: LASES generates $4,399,240 annually through reimbursement for FITAP and KCSP grants, genetic test fees, parent locate fees, child support application fees, Federal deficit reductions act fees and NSF recovery fees in addition to the estimated $20M in non-FITAP and non-KCSP payments.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1994	24	2015	Federal = 34% SGF = 66%	$75M-$100M

Key System: Tracking Information Payment System (TIPS): Score = 5

Description: On-line, statewide interagency information management and payment system capable of tracking client information and generating payments for Child Welfare (CW) clients.

Social Impact: Currently 4,348 children are being served in Foster Care, 7,041 children are receiving an Adoption Subsidy, and 92 children are receiving a Guardianship Subsidy. Should the TIPS application fail, DCFS would not be able to track any of the individuals being served, would have no way of identifying where the served children are located, would have no way of paying any of the providers for services, and no way of establishing responsible parties in provision of care and service to the clients.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1986	32	2015	Federal = 50% SGF = 50%	$50M-$75M

NOTE: TIPS is used by both DOE and DCFS. While DOE is using TIPS for Early Childhood programs, DCFS uses TIPS for the tracking and generation of payments to Child Welfare clients.

Key System: Statewide Income and Eligibility Verification System (SIEVS): Score = 5

Description: Application used to obtain and use data from the Social Security Administration Wage and Benefit files, the Internal Revenue Service Unearned Income file and the State wage information collection agency wage and benefit files. SIEVS is a requirement of the Federal funding agencies to provide State agencies with additional sources of useful information in verifying applicant and recipient reported circumstances.

Social Impact: Approximately $110 million in SNAP benefits would not be issued to constituents should this system fail.

Economic Impact: While SIEVS generates no funds for the agency, system failure could result in the loss of $58 million in funding for Administrative Costs from FNS (USDA Food and Nutrition Service), due to SNAP program non-compliance.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1986	32	2015	Federal = 50% SGF = 50%	$2M-$5M

Key System: Louisiana Automated Online Information System (LAMI)*: Score = 5

Description: This system provides eligibility determination and benefit-calculation that encompasses human services programs. ***NOTE: LAMI is currently under redesign and is set to be decommissioned and ultimately replaced with Integrated Eligibility in FY 2019.***

Social Impact: If LAMI were to fail, SNAP (Supplemental Nutrition Assistance Program) and TANF (Temporary Assistance for Needy Families) applications and redeterminations could not be processed. There are currently 410,348 SNAP households representing 890,723 individuals and 5,923 TANF households representing 14,375 individuals in Louisiana.

Economic Impact: LAMI does not impact revenue generation; however, LAMI issues an average of $112,049,588 in SNAP benefits and $1,484,135 in TANF benefits each month and, if the application failed, these benefits would not be issued, potentially resulting in DCFS losing its annual TANF grant of

$163,971,985 and its SNAP Administrative Costs funding of approximately $58,000,000 for non-compliance.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1994	24	2015	Federal = 80% SGF = 20%	$75M-$100M

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Department of Environmental Quality (DEQ)

Key System: Tools for Environmental Management and Protection Organizations (TEMPO360): Score = 5

Description: TEMPO360 is the core business application for DEQ and critical to every area of operations of the agency in addition to interfacing or connecting with multiple other applications including document imaging, financial, Geographic Information Systems (GIS) and public consumption of services such as online reporting. Essentially, it is the central data management system to track facilities, people, and organizations that are of interest to the DEQ and to track activities of the Department including permitting, monitoring, surveillance, and enforcement activities. It also allows DEQ to meet its federally mandated reporting to EPA. This application is a 3rd party application owned by CGI and the State has been informed that TEMPO360 will no longer be supported in 2020-2021.

Social Impact: While TEMPO360 is not directly used by the public, the negative impacts to DEQ from the loss of TEMPO360 in terms of the agency's activities may have a number of unforeseeable social impacts as the loss of efficiency in DEQ's activities has negative effects on business and industry within the State.

Economic Impact: For the 2016 fiscal year, income to DEQ through the 41,396 invoices generated from TEMPO360 was $45,319,725.68. In FY 2017, 38,888 invoices generated $42,987,473.63 in income (slightly lower due to the 2016 flood event), which flow into the Environmental Trust Fund (ETF) that provides DEQs budget. In addition to the direct economic impact to the agency, numerous cascading economic impacts to business and industry will be felt due to the adverse effect the loss of the TEMPO360 application will have on DEQ's efficiency and ability to quickly process permit applications, etc.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2000	17	2017	STAT DED = 100%	$5M-$10M

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Division of Administration (DOA)

Key System: Budget Reporting and Analysis Support System (BRASS): Score = 5

Description: BRASS is the primary Operating Budget Development System utilized by Division of Administration – Office of Planning and Budget (OPB) to develop the operating budget, House Bill 1 (HB1), for the State.

Social Impact: While the revenue side of the ledger is not directly impacted, the expense side would be, since without capital outlay expenditures, items such as State office building maintenance would be severely impacted. Without a legal Operating Budget, State government would have to close its doors and the impact all services provided to the citizens of Louisiana.

Economic Impact: While not directly impacting revenue, BRASS, BDS and other applications like BRASS all exist to develop the Budget for the State of Louisiana - House Bill 1 (Operating Budget) and House Bill 2 (Capital Outlay Budget). So while revenue is not directly impacted, the State could not function without a legislatively passed and Governor signed budget for the upcoming budget fiscal year. The economic impact of a shutdown of State government is difficult to quantify, but certainly significant.

Note that this system is scheduled to be migrated to SAP, however, that has a minimum 2 year implementation. It is critical that BRASS remain functional in the interim.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2003	15	2011	SGF = 100%	$5M*

Key System: Budget Development System (BDS): Score = 3.5

Description: (BDS) is the primary Capital Outlay (CO) Budget Development System. Utilized by Facility Planning and Control (FPC) for development of the Capital Outlay (CO) Bill - House Bill 2 (HB2), tracking of Capital Outlay (CO) amendments during the Session, submission and workflow of funded CO requests through the CO payment process, and interfacing to the State's ERP systems to grant budget authority for CO expenditures.

Social Impact: While the revenue side of the ledger is not directly impacted, the expense side would be, since without capital outlay expenditures, items such as State office building maintenance would be severely impacted. Without a legal Operating Budget, State government would have to close its doors and the impact all services provided to the citizens of Louisiana.

Economic Impact: While not directly impacting revenue, BRASS, BDS and other applications like BDS all exist to develop the Budget for the State of Louisiana - House Bill 1 (Operating Budget) and House Bill 2

(Capital Outlay Budget). So while revenue is not directly impacted, the State could not function without a legislatively passed and Governor signed budget for the upcoming budget fiscal year.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2003	15	2003	SGF = 100%	$2M-$5M*

Key System: Capital Outlay Reporting and Tracking System (CORTS): Score = 3.5

Description: Custom/In-house software to allow (1) agencies to develop & submit Capital Outlay requests to FPC electronically, (2) FPC to review and prioritize Capital Outlay requests after FPC receipt.

Social Impact: Necessary infrastructure maintenance and/or construction might not occur with CORTS being unavailable as requests will go unfulfilled. Delivery of statutorily mandated programs and services could also be impacted, such as road and building maintenance and construction projects could be negatively affected.

Economic Impact: While not directly impacting revenue, CORTS is used to develop the Capital Outlay Budget for the State of Louisiana - House Bill 2 (Capital Outlay Budget). While revenue would not be directly impacted, the State could not properly function without a legislatively passed and Governor signed capital outlay budget for the upcoming budget fiscal year.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1997	31	1997	SGF = 100%	$2M-$5M*

***NOTE: LaGov capital budget is a potential replacement for BRASS, BDS, and CORTS.**

Department of Corrections (DOC)

Key System: Centralized Inmate Banking System (CIBS): Score = 5

Description: The Centralized Inmate Banking System (CIBS) is the primary mechanism that supports the Department's offender canteen and banking operations. Managing over 50,000 offender banking accounts, this application was originally written and deployed in 1990, making the application 28 years of service with its most recent upgrade in 2015.

Social Impact: Victim Restitution Management, Mandated Court Fee Management, Managed in accordance with R.S. 15:874, Offender Account Family Requests, Offender ARPs leading to Lawsuits

Economic Impact: Canteen Inventory Management/Sales/Revenue and Sales Tax Reporting, Possible Offender Lawsuits, Restitution and Court Fee Management, Debt System Management, used to track, bill for, and post payments for Incentive wages, Jpay and Securus files and revenue from sales. In 2017, CIBS managed over 50,000 Offender banking accounts, over 30,000 checks were issued, over 260,000 deposits were accepted and there were over 800,000 individual Canteen sales transactions processed.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2015	SGF = 100%	$2M-$5M*

Key System: Corrections and Justice Unified Network (CAJUN): Score = 5

Description: The CAJUN (Corrections and Justice Unified Network) system was brought online in 1991. It tracks all adult felons both incarcerated and under supervision. In addition to its use within the Department CAJUN has become one of the State's primary sources of documented felony convictions for other law-enforcement and criminal justice agencies. To meet the needs of other agencies, a replica of CAJUN (CAJUN Internet) is on the Department's web server. Over 2,000 authorized outside users and State agencies have access to CAJUN Internet for inquiries and sheriffs billing.

Social Impact: Offender Physical Location Management to ensure Public Safety, Time Computation to calculate Correct Release Dates, Sheriff's Housing Management, Offense Management, Offender housing status files sent to and used by DCFS for Child Support, DHH for Medicaid, SSA to Suspend Social Security upon incarceration, and Snap for Food Stamp approval, FEMA/Emergency Management for offender tracking/reporting.

Economic Impact: Sheriff's Housing Payment Management (Should be over $170 million this year)/Based on Housing status, Time Computation/Correct Release Dates to ensure accurate expenditures, Offender ARP/Lawsuits Costs.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1987	31	2015	SGF = 100%	$5M-$10M*

Key System: Corrections Automated Personnel & Payroll Employee Database (CAPPED): Score =5

Description: The Corrections Automated Personnel & Payroll Employee Database (CAPPED) system tracks the Departments training for staff.

Social Impact: If CAPPED were unavailable or data was lost, DOC would be unable to provide an electronic record of employee training (past or present). DOC relies on CAPPED for ACA, ORM and legal reporting purposes.

Economic Impact: Loss of ACA accreditation would potentially result in more lawsuits. Losses in Civil Service, Federal and state legal cases, increased risk management costs, and losses of CAPPED would result in up to a 10% increase in staffing and require a complete restructuring of the process that the department uses to conduct and record training.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2016	SGF = 100%	$500K-$1M

Key System: Probation and Parole (P&P): Score = 5

Description: The Probation and Parole (P&P) application is the main case management system designed to operate in a distributed computer environment. Probation and Parole relies on Case Management in Lotus Notes to maintain data and manage offenders currently on supervision. Probation and Parole has over 71,000 offenders convicted of felonies on supervision. With 510 field officers, the average headcount per officer is 139 offenders. Case Management is a tool that maintains contact information such as addresses, phone numbers, relatives and special notes on the offender regarding his status and supervision level.

Social Impact: Because this information is not in any other database, the risk of losing this Case Management system would cause great risk to the community, to public safety, and to officer safety. It would also create an unfairness to the offender that could possibly lead to law suits for improper actions. Probation and Parole relies on this Case Management system to provide officers with the offender's address and contact information. To lose contact with over 71,000 offenders in the community including sex offenders and violent offenders would be a great risk to public safety. Probation and Parole relies on this CMS to maintain offender's status and supervision level. All offenders are assigned a supervision level based on statute, policy or a risk/needs assessment tool which is maintained in the system. Due to the

volume of cases, Probation and Parole uses the supervision level to establish priority to the higher risk offenders.

Economic Impact: Without the risk/needs assessment information, all offenders would have to be supervised at the highest level until a new assessment system could be created. This would impact public safety by losing focus on high risk cases and economically, it would impact the budget by having to provide overtime to staff to recreate file information. Probation and Parole relies on a CMS to maintain case notes and special notes. All contacts with the offender and all known events are documented in the system. Documentation includes the offender's status, violations, treatment referrals, conditions of supervision, and special notes. A special note may include information on the offender's history of violence which would alert officers or staff dealing with the case, to proceed with caution. Accurate documentation and history is necessary to enhance public safety and provide proper supervision. A loss of the case notes would pose a public safety risk, officer safety risk and/or offender safety risk. Accurate and up-to-date records are important for Probation and Parole to effectively supervise offenders to successfully reintegrate them into society. The case notes and reports are automated to pull in the offender's information to populate the documents. A loss of this system would increase the workload of staff approximately 20% to perform the same duties. In November of 2017, Probation and Parole documented over 80,000 case notes and created over 20,000 documents that were provided to the Courts, Parole Board and to the offender.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2015	SGF = 100%	$500K-$1M*

***NOTE: CIBS, P&P, and CAJUN are applications that could be combined into a single Offender Management System (OMS). This platform can be a COTS application or custom development.**

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Department of Education (DOE)

Key System: Tracking Information Payment System (TIPS): Score = 5

Description: TIPS is a computerized on-line, statewide interagency information management and payment system which is capable of tracking client information and generating payments for Child Welfare (CW) clients. The TIPS system serves as the Louisiana Adoption Resource Exchange (LARE). TIPS provides provider management (Daycare Providers) for the DOE Early Childhood process, but is primarily a Child Welfare System.

Social Impact: The TIPS system contains daycare provider information, which includes banking information. Some of this information is used by CAPS when it comes to issuing payments. The failure of this application would halt payments to daycare centers providing critical services to Louisiana citizens who are considered at risk.

Economic Impact: For the month of December 2017, DOE made payments to daycare facilities totaling $5,328.134.44.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1998	20	2015	Federal = 100%	$1M-$2M

NOTE: TIPS is used by both DOE and DCFS. While DOE is using TIPS for Early Childhood programs, DCFS uses TIPS for the tracking and generation of payments to Child Welfare clients.

Key System: Childcare Assistance Program System (CAPS): Score = 3.5

Description: CAPS is a system to determine eligibility for CCAP childcare assistance based upon Child Care Development Block Grant Act of 2014 and Federal Standard 45 CFR Part 98.

Social Impact: The failure of this application would halt payments to daycare centers providing critical services to Louisiana citizens who are considered at risk, which are 16,724 children and included 910 daycare facilities statewide as of December 2017. It would also stop attendance verification which has the potential to increase fraud. This would prevent DOE staff from determining child eligibility for daycare and also would prevent DOE from receiving referrals from Strategies to Empower People (STEP) program for placing children in daycare.

Economic Impact: For the month of December 2017, DOE made payments to daycare facilities totaling $5,328.134.44.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2001	17	2015	Federal = 100%	$1M-$2M

Key System: Bureau of Licensing Application System (BLAS)*: Score = 3.5

Description: BLAS is an application used to establish and maintain information relating to the licenses for all childcare programs. The system is used to generate letters, licenses, and statistical reports.

Social Impact: DOE would lose the ability to manage information on daycares, which includes such things as licensing and daycare inspection. The failure of this system would also drop the data feed to the SchoolFinder website that provides information to the general public on daycares in the area and the daycare facility license status. ***NOTE: The system is slated to be decommissioned in Q1 FY2019 and replaced with SansWrite X Web Application Framework.***

Economic Impact: For the month of December 2017, DOE made payments to daycare facilities totaling $5,328.134.44. This would also reduce the number of children Louisiana could serve if centers could not renew licenses or request new licenses.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1999	19	2017	Federal = 100%	$1M-$2M

NOTE: BLAS is used by both DOE and DCFS. While DOE is using BLAS for Early Childhood programs, DCFS uses BLAS for Child Welfare clients.

Key System: Louisiana Longitudinal Data Repository (LEDRS): Score = 3.5

Description: Database that aligns DOE data longitudinally. It connects data from approximately twenty different data sources/systems. Provides avenue for researching and reporting. DOE's finance team utilizes LEDRS data and reports to meet Federal reporting requirements. Both DOE and the school districts use data and reports from LEDRS to meet Louisiana Legislative Auditor audit assurance requirements. The districts, public and researchers utilize LEDRS staff reports to assess Louisiana's workforce and make staffing decisions.

Social Impact: LEDRS provides an entry and access for LDOE Staff, Districts and Schools to access historical data, reports and information for making business decisions. The largest impact would be for districts and

schools who need student level data to determine courses of action which impact a K-12 students current and future education opportunities and advancement.

Economic Impact: The loss of LEDRS would result in the Department recreating these reports to satisfy Federal reporting. It would take several FTE's several months initially and then each year to generate these reports, thus potential undeterminable economic impact due to efficiencies lost exists. It potentially could result in loss of Federal funds.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2009	9	2009	SGF = 100%	$2M-$5M

Key System: Curriculum Verification and Results Reporting Portal (CVR): Score = 3.5

Description: The CVR system derives data from the LRS database which gathers data from PEP, SIS, and CUR. Teachers and Principals create logins through a self-registration process and may then update student lists. Principals use the system to verify student rosters and have access to override or approve changes. Once all data has been verified, program administrators use this information to assess teacher-student and school-student achievement outcomes. The achievement outcomes are then loaded into the CVR database and the CVR system will display achievement outcome reports for individual teachers and principals.

Social Impact: If unavailable, DOE would not be able to accurately tie student, teachers and standardized test score together which in turn would prevent them from accurately assessing how various education programs are performing. It would also take away one of the tools people use to identify both exceptional and poor performing teachers/student, resulting in the inability to learn from the successful educators and to also take corrective action with the underperformers.

Economic Impact: Personnel decisions such as promotions and terminations are made using data from this system.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2009	9	2009	SGF = 100%	$500K-$1M

Key System: Human Capital System (HCS): Score = 3.5

Description: The HCS is a data system that supports human capital functions such as goal-setting, professional development planning, observation/conferencing cycles, and annual evaluations for teachers and leaders across the State. The HCS links to PEP to obtain basic personnel information and to CVR to obtain value-added data. HCS may be expanded to support additional human capital processes, including recruitment and staffing.

Social Impact: If unavailable, it severely limits the ability for professional development planning and evaluations. This system is used in conjunction with other systems to calculate the VAM scores. This could result in the failure to identify underperforming educators and take the necessary correction actions with these educators, thereby reducing the ability of the State to educate students properly.

Economic Impact: Personnel decisions such as promotions and terminations are made using data from this system.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2012	6	2012	SGF = 100%	$1M-$2M

Key System: Student Information System (SIS): Score = 3.5

Description: SIS is used to collect data on students attending public and non-public schools. The data collected is used for various programs and objectives. Allocations to Federal program sub-recipients are based on information that is maintained in the SIS database. The 68 parish/city school districts, the two lab schools, all charter schools, and the Recovery School District (RSD) are required to enter student data in SIS. The SIS database is comprised of enrollment records for each student in Louisiana's Public Schools. The student information contained within the database is demographic, disciplinary, enrollment, and exit related. Individual students are identified in the system by State identification number.

Social Impact: If unavailable, DOE would not be able to calculate MFP funding nor generate federally required reporting. This would result in less money going to the school districts, ultimately reducing various educational programs available to students. The Office of Civil Rights reporting comes from this system.

Economic Impact: Inability to fulfill State and Federal reporting requirements will result in the loss of State and Federal funds.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2009	9	2009	SGF = 100%	$1M-$2M

Key System: Student Transcript System (STS): Score = 3.5

Description: The student transcript system (STS) currently collects detailed transcript data on Louisiana students in both public and nonpublic high schools. Data are sent throughout the year in both online and batch form. Two different groups extract data from STS: Board of Regents and LOSFA. Regents request their Ranking File at three "harvests": February 15th, June 15th and September 15th. That file has one record per student and contains student demographic data, their overall GPA, progress toward post-secondary acceptance criterion, and two calculated ranks: rank in graduating class and rank in whole class. LOSFA runs their extracts throughout the year, but are more active in a May-September timeframe. The extract gives details on a student progress toward a TOPS award, and is one record per student per award per award category. Both BOR and LOSFA also receive the transcript detail extract.

Social Impact: Inability for BOR to determine for some graduates eligibility to attend post-secondary institutions.

Economic Impact: Inability for DOE to determine which students are to qualify for certain scholarships, such as TOPS. For FY17, TOPS scholarships alone were $209M.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2009	9	2017	SGF = 100%	$1M-$2M

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Department of Transportation & Development (DOTD)

Key System: SIGN – Advertising Signs: Score = 5

Description: Supports DOTD in maintaining a statewide inventory of and issuing permits for advertising signs. A new system called ePermit, currently scheduled to go live in Q4 FY2017, will replace this system in its entirety.

Social Impact: A failure of SIGN would require manual permitting, which will increase delays in business' getting their advertising sign permits.

Economic Impact: The system brings in approximately $500,000 annually. If the system failed, permitting would continue but slow down due to manual processes which in turn would reduce revenue.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1975	43	2015	STAT DED = 100%	$100K-$500K

Key System: STRM – Structures Inventory: Score = 5

Description: Bridge inventory and inspection information required to meet Federal Highway Administration (FHWA) laws and requirements.

Social Impact: Failure of this system would forbid DOTD from adding new bridges to its inventory which is required by FHWA within 90 days of opening a new bridge.

Economic Impact: While the system itself is not involved with revenue generation, maintaining access to this system directly impacts DOTD's highway bridge program funding from FHWA. In addition, an OTS employee is dedicated to STRM support and the applicable salary is paid with State funds. The funding for the State's bridge repair and replacement program is approximately $130M per year and is contingent on the State maintaining compliance with Federal rules. Without this program, the entire cost of bridge replacement and rehab would have to be funded by 100% State TTF or other State only funds. FHWA would not levy a fine, but they could find DOTD in non-compliance resulting in the loss of eligibility for the $130M annual funding.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1980	38	2016	Federal = 100%	$500K-$1M

Key System: GeauxPass.com/Integrated Electronic Toll Collection System: Score = 4

Description: GeauxPass allows for automated toll collection via vehicle decals. Processing is conducted locally via a server in Leesville. This data is replicated to the ISB. However there is no redundancy for the data network both to the server and to the ISB. In addition, there are security concerns with the local server.

Social Impact: The public would experience delays when using the toll booth, however the functionality of GeauxPass will be able to exist although greatly inefficient. It is estimated that on average for the last 7 fiscal years 1,279,954 vehicles pass through the GeauxPass toll annually.

Economic Impact: Tolls can still be collected via cash or credit card should GeauxPass go down. The credit card component is dependent upon the existing network to route to Bank of America for processing. If this network goes down, the toll booth performs manual credit card processing on paper and transactions are entered once the network is back up. GeauxPass has generated on average $4,945,106 in revenue annually over the last 7 fiscal years.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2009	9	2015	SGF = 100%	$2M-$5M

Key System: Avaya PBX Phone Systems: Score = 5

Description: DOTD is the only agency with its own PBX (private branch exchange), or phone system within the Executive Branch. This phone system is past the product's EOL, and is currently managed by a 3rd party vendor, which means it is not supported by OTS telecommunications staff. In addition to the PBX infrastructure, phones, call management software, and the phone system's wiring in the DOTD facilities State-wide is outdated and in need of replacement when a new system replaces the existing PBX.

There are 12 PBX systems supporting DOTD. DOTD uses this system as its primary voice communication system across the State. Voice communication would resort to personal cellular devices, satellite mi-fi devices, DOTD hand-held radios (limited number), GET cards, fixed satellite dish (36 phones), and mobile satellite trailer (36 phones). DOTD is a major ESF-1 and ESF-3 State agency.

Social Impact: Should DOTD lose communications with its division's offices with a downed PBX, the business will grind to a halt and negatively impact the function that DOTD provides the constituents of the Louisiana. Failure of its PBX system could result in major social impacts as roads and bridges in Louisiana could remain unusable due to limited communication in an emergency or disaster situation, impacting citizens and business in and out of Louisiana.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1999	19	2005	SGF = 100%	$2M-$5M

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Department of Public Safety (DPS)

Key System: OMV Driver's License Unisys: Score = 5

Description: Description: This application is responsible for the issuance and renewal of all classes of driver's license, ID cards and handicap credentials.

Social Impacts: Inability to print or issue credentials that are used by several entities including law enforcement to identify LA citizens as well as identifying the level of privileges to operate motor vehicles in this State and other states across the US. This will affect the Commercial Licensing program and gasoline industry.

Economic Impact: The economic impacts of this platform becoming unavailable impacts the DPS $1.4B annual revenue generation.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1985	33	2017	STAT DED = 100%	$2M-$5M

Key System: OMV Vehicle Registration Unisys: Score = 5

Description: Description: This application is responsible for the issuance and renewal of all vehicle type license plates, titles, registrations, and taxes.

Social Impacts: Inability to issue documentation to properly identify ownership of a vehicle by law enforcement.

Economic Impact: The economic impacts of this platform becoming unavailable impacts the DPS $1.4B annual revenue generation. Revenue loss for licensing fees, major impact for tax collection for all State and local governing authorities. Title and registration fees are also used to fund OMV as well as other agencies as delegated by law.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1984	34	2017	STAT DED = 100%	$2M-$5M

Key System: OMV Suspension & Reinstatement Unisys: Score = 5

Description: Description: This applications is responsible for managing the revocation and reinstatement of driving privileges and maintaining driver violations and history.
Social Impacts: The inability to revoke/suspend/reinstate driving privileges would have a huge impact on the safety of citizens as well as an economic impact on the State's revenue. The driver history is also

stored here and used in determining eligibility of citizens to drive. LA OMV would not be able to conform to State and Federal regulations/laws with regard to driving privileges.

Economic Impact: The economic impacts of this platform becoming unavailable impacts the DPS $1.4B annual revenue generation.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1984	34	2017	STAT DED = 100%	$2M-$5M

Key System: DPS Finance Unisys: Score = 5

Description: The calculation, collection, and distribution of all monies collected from DPS systems. This system interfaces to ISIS and State Banks for revenue classification and disbursements.

Social Impact: The core financial system for DPS becoming unavailable would essentially shut down all services for constituents as this platform calculates, collects, and distributes all monies collected by DPS.

Economic Impact: Loss of this application is detrimental to timely classification and therefore availability of approximately $1.4B in revenue generated annually by DPS.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1984	34	2017	STAT DED = 100%	$10M-$20M

Key System: Louisiana Computerized Criminal History (CCH): Score = 5

Description: The CCH system is the core criminal justice information system (CJIS) for the State of Louisiana as it provides comprehensive arrest and disposition information accessible to all law enforcement agencies including Federal, State, local, and municipal entities. CCH is approaching 4 decades of service.

Social Impact: Civil agencies mandated by State and Federal law to conduct criminal history record background checks for employment and licensing would no longer be able to receive this data. Criminal justice agencies would no longer be able to run criminal history records for processes including but not limited to investigations, arrests, court sentencing, and incarceration.

Economic Impact: Federal grant monies managed by the Louisiana Commission on Law Enforcement (LCLE) are tied to the criminal history data collected, stored and disseminated by CCH and may be negatively impacted. CCH generated approximately $8.2M in civil background check fees in calendar year 2017 (316,161 background checks @ $26 each).

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1980	38	3	STAT DED = 100%	$5-$10M

Key System: Troop/Unit Desk Log (Desk Log): Score = 5

Description: Desk Log is a repository of entries LSP troops are required to maintain by procedural order and is the core application the troopers use. It includes information on highway accidents, incidents and arrests to which LSP officers have responded or have been party to as well as other troop activities and work schedules. Currently a Lotus Notes application, entries by the troopers are manually driven and is inefficient.

Social Impact: All crashes, arrests, and other incidents managed by State Police troops/personnel are recorded in the Desk Log which impacts public safety at large.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2016	STAT DED = 100%	$100K-$500K

Key System: LEMS Desktop Web Interface: Score = 3.5

Description: LEMS is a browser-based application that provides access to the Law Enforcement Messaging Switch (LEMS) using OMINXX. This interface provides the capability to query NCIC and NLETS databases. The LEMS switch is a critical component of the process by which criminal history information is collected, stored, disseminated and accessed by local, State, and Federal criminal justice agencies and civil agencies authorized to receive criminal history data. Omnixx is a software application by which criminal justice agencies access criminal history data stored in CCH.

Social Impact: Constituents requiring a background check for employment or licensing due to State and Federal laws would be negatively impacted. Without an application, name-based queries of State and Federal criminal history data cannot be performed by criminal justice agencies. The ability of the criminal justice community to protect and serve constituents would be negatively impacted.

Economic Impact: The LEMS switch does not impact revenue generation. Outside funding would not be impacted. Omnixx software application will not impact outside funding and does not impact revenue generation.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1999	19	2000	STAT DED = 100%	$49K-$100K

Key System: Louisiana Integrated Gaming History Tracking System (LIGHT): Score = 4

Description: The LIGHT database is used by LSP Gaming Enforcement Personnel to issue various types of Gaming Licenses for riverboat, land-based, racetrack, and video gaming entities, employees, machines, and distributors. This database assists the State Police in tracking Licensing Fees, incoming revenue, civil penalties and fines for the entire State.

Social Impact: The State would not be able to license and track, casino and video gaming entities, employees, distributors, machines, and gaming locations, allowing for potential fraud and loss of State revenues benefiting the public. The Licensing system also interfaces with various statewide criminal systems, increasing Law Enforcements criminal investigation tools.

Economic Impact: The collecting of licensing/renewal fees, civil penalties, tracking of approved/denied Gaming vendors and employees, and tracking of Casino revenue to determine Gaming taxes owed to the State would be impacted by LIGHT being unavailable. Combined FY2017 revenue taken in was over $528M.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2003	15	2016	STAT DED = 100%	$2M-$5M

Key System: Video Gaming (LSP): Score = 5

Description: This application is supported by Louisiana State Police technology personnel and not managed by OTS, however, OTS does own the server infrastructure that the application resides on. This 3rd party application was owned by GTECH and was under support until a few years ago. OTS is requesting to upgrade both platform and application via RFP.

Social Impact: If this system goes down, gaming devices will not be accessible by the public.

Economic Impact: Video poker gaming revenue for FY2016 was $172,923,066. If this system goes down, the State cannot collect the video poker revenues.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1998	20	2008	STAT DED = 100%	$10-$20M

Key System: Computer Aided Dispatch/Record Management System (CAD/RMS): Score = 5

Description: CAD/RMS is not a current system, but should be and needs to be included on the HCR 121 response. The application fills a void in OTS' ability to support Law Enforcement as this functionality doesn't exist today within the State. Additionally, an all-encompassing system like this will replace a number of the current Lotus Notes databases. There is potential that as the implementation of a CAD/RMS system unfolds, additional Lotus Notes databases could be included which may or may not impact costs above the estimated $5M-$10M costs.

Social Impact: This application would drive multiple levels of emergency management efficiencies for crashes, arrests, incidents, investigations, and enforcement for State Police personnel and allow LSP to interact with CAD/RMS platforms in other states, which impacts public safety at large.

Economic Impact: Since this system is yet to be introduced there are potential undeterminable economic impact due to efficiencies lost by not introducing the system.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
N/A	N/A	N/A	STAT DED = 100%	$5M-$10M

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Department of Wildlife & Fisheries (DWF)

Key System: Jea Patrol: Score = 3.5

Description: Mobile application that is used to keep track of Enforcement Agents' contact information with vessel operators and dealers. This mobile app built for iPads is used by LDWF Law Enforcement officers to collect data from offshore vessels that is used by NOAA. NOAA funds the hours and supplies needed for these services. This is a 32-bit application that will not be compatible with the future Apple iOS updates.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2010	8	2010	Federal = 100%	$500K-$1M

Key System: Motor Boat Licensing & Registration: Score = 3.5

Description: Internal facing application that allows for the registration and titling of all water craft. All motorized vessels/watercraft must be registered in Louisiana. This application keeps with the history of each boat, registered owners, and renewals. There are over 300,000 registered boats each year. The price to register a boat starts at $53.00 and goes up depending on the length of the boat. Boat registrations are valid for three years.

Social Impact: The public would not be able to register/transfer a boat without this system.

Economic Impact: An average of $85,000 per week would be lost in revenue generation if the motorboat application was unavailable. The motor boat application brings close to $4.5M per year.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2008	10	2008	STAT DED = 100%	$500K-$1M

Key System: Oyster Lease: Score = 3.5

Description: Internal application that tracks oyster fishing leases within State territorial waters. This application is a stand-alone application on a stand-alone server that is EOL without redundancy. To

harvest oysters in Louisiana you must either lease water bottoms or use public oyster grounds. This application keeps up with 400,000+ acres of leased water bottoms that are leased at a rate of $3.00 per acre.

Social Impact: Public that owns Oyster Leases would not have access for information nor be able to transfer or renew their leases causing their livelihoods to be at risk.

Economic Impact: An average of $25,000 per week would be lost in revenue if the Oyster Lease application was unavailable.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2013	5	2014	Federal = 100%	$500K-$1M

Key System: Enforcement Application (Citation): Score = 3.5

Description: Used to maintain information on all citations written to violators by Enforcement Agents. This application stores all citations/warnings written to violators. It contains the history and status of all citations whether criminal or civil.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2004	14	2004	STAT DED = 100%	$500K-$1M*

Key System: Enforcement Complaint: Score = 3.5

Description: Scans and uploads forms submitted by agents. This application records complaints from the public. They are assigned to the appropriate personnel and updated with status after investigated.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2001	17	2001	STAT DED = 100%	$500K-$1M*

Key System: Enforcement Employee Roster: Score = 3.5

Description: Maintains Enforcement employee information used by the Timesheet system. This application is a listing of all DWF law enforcement officers, rankings, and other related information. This application is referenced by the other enforcement applications.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2015	3	2015	STAT DED = 100%	$49K-$100K*

Key System: Enforcement Seafood Inspection: Score = 3.5

Description: This application is used in tracking seafood coming across State lines. The driver must call DWF to get a permit number and relay information about what type of seafood, how much, where it is going, etc. If the driver is stopped after crossing State lines there could be a citation written for not being permitted to deliver seafood to or through Louisiana. Scans and uploads forms submitted by agents.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2001	17	2001	STAT DED = 100%	$49K-$100K*

Key System: Enforcement Timesheet: Score = 3.5

Description: Timesheet information is cross-referenced with data from Enforcement citation system. This application imports data that is scanned from law enforcement officers' handwritten timesheets and allows for correction. It is used to cross-reference duties in the citation system. Depending on the duty, grant funding may be used to pay the salary of the agents.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2005	13	2005	STAT DED = 100%	$49K-$100K*

***NOTE: The 5 enforcement applications within DWF could be consolidated into a single Enforcement application. This platform can be a COTS application or custom development.**

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Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)

Key System: Web-EOC: Score = 4

Description: State of Louisiana's resource tool which provides support for the parish and State officials during emergency events.

Social Impact: This application is the mechanism for tracking all support services, logistics, and emergency management coordination for State responses during emergencies. Federal and local entities will also not be able to interact with GOHSEP should Web-EOC be unavailable.

Economic Impact: Federal reimbursement to the State for expenses occurred during an emergency could be potentially delayed.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2007	11	2016	Federal = 100%	$100K-$500K

Key System: Louisiana Emergency Assistance Data Portal (LEAD): Score = 4

Description: Emergency management portal that allows users to view web-based mapping software for critical data layers and analysis during natural disasters by showing how flooding, fires, etc. impacts communities and constituents.

Social Impact: Without the use of LEAD, State emergency management personnel would be delayed in assessing the impacts of natural disasters and therefore delay assistance to the public.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2014	4	2014	Federal = 100%	$100K-$500K

Key System: Louisiana Public Assistance (LAPA): Score = 4

Description: This tool is used after emergency to assist public in applying for financial help. LAPA provides assistance to GOHSEP recovery specialists in tracking the lifetime of a Project worksheet after a disaster is declared. Currently this application does carry vendor support.

Social Impact: Assistance to the public in applying for financial help would be delayed following natural disasters without the use of LAPA.

Economic Impact: The economic impact of LAPA being unavailable is relative to the assistance funding for the natural disaster in discussion. LAPA manages $624M each fiscal year.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2008	10	2016	Federal = 100%	$100K-$500K

Key System: Louisiana Hazard Mitigation (LAHM): Score = 4

Description: This tool is used before an emergency to help residents to prepare for the hurricane season. LAHM provides assistance to GOHSEP mitigation specialists in tracking the mitigation funds that are being used for mitigation purposes. Currently this application does carry vendor support.

Social Impact: The public would have to seek storm preparedness steps from other sources or miss out on information that could help them prepare for an emergency.

Economic Impact: The economic impact of LAHM being unavailable is LAHM manages $322M each fiscal year.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2012	6	2016	Federal = 100%	$100K-$500K

Key System: Gohsep.net: Score = 4

Description: GOHSEP's internal SharePoint environment for document repository and day to day operational needs, such as personnel management, policy storage, and other operational tasks.

Social Impact: This is an internal facing application. The potential degradation of services to constituents from undetermined potential efficiencies lost is immense as this platform is the operational hub for the agency.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost exist.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2009	9	2012	Federal = 100%	$100K-$500K

Key System: Emergency.louisiana.gov: Score = 4

Description: State of Louisiana's emergency event public website which provides assistance to the citizens of Louisiana during a statewide emergency event. This is a public website used to post Governor declarations/announcements/press releases.

Social Impact: The public uses this information site for updates on activities during and after a natural disaster including road closure information, safe drinking water steps, and other emergency resources. Any downtime will result in communication disconnect between the Governor's office and the public.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2008	10	2008	Federal = 100%	$100K-$500K

Key System: Lotus Notes: Score = 3.5

Description: Provides grant management for preparedness grant administration. Every grant that GOHSEP receives is managed through Lotus Notes.

Social Impact: Every action provided by GOHSEP could be negatively impacted by this application going down and impact the public at large during natural disasters. This tool is used after emergency to manage grands/Federal funds to support the recovery effort. Failure would result suspending any funding related process for the recovery.

Economic Impact: This application manages approximately $29M in grants annually.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2008	10	2008	Federal = 100%	$100K-$500K

Louisiana Department of Health (LDH)

Key System: OBH-Patient Information Program (PIP): Score = 5

Description: An electronic medical record system that provides administrative and clinical data on all persons served in each OBH/MH inpatient program statewide. These Applications are linked to HCS, which is the Medical Dispensing and Inventory Control application. This Application is used to track Medications dispensed to the Clients at Central State Hospital. Data is shared between these various Applications, and everything done in the Pharmacy is based on what is in PIP.

Social Impact: The Data in both PIP and the Incident Applications are critical to the operations at Central State Hospital, and the care of the Clients that are housed there. This system tracks all patient information for Central Hospital (120 patients) and East Louisiana Mental Health System (650 patients). Information is used to generate Uncompensated Cost Care Reports for Medicaid and DSH Audits.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1993	25	2016	SGF = 100%	$100K-$500K

Key System: OPH – Public Health Automated Management Enabler (PHAME): Score = 5

Description: PHAME is a mission-critical, statewide application used to determine eligibility for the Women, Infants and Children (WIC) program, which provides funding for Federal grants to States for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk. This system is in public health facilities and WIC contract agencies across the State, impacting an average of 117, 989 participants. WIC benefits are provided through a system of retail grocery stores across the State, there are approximately 559 authorized vendors. PHAME collects demographic data, vendor data, food instrument data and product data. The system provides direct interface with Solutran electronic payment processing technology for reconciliation of food instruments and the return of redemption data and amounts on a daily basis. PHAME captures all relevant participant information, food prescriptions and generates pre-defined reports based on data it has collected.

PHAME will ultimately be replaced by MOSAIC, an application being built in collaboration with the State of Texas and other partner states. LDH will use MOSAIC at a cost of an approximate $4,000,000.00 implementation with support through 2019. Yearly maintenance costs for MOSAIC are estimated to be $800,000.00.

Social Impact: The program provides nutrition assistance to over 118,000 citizens over 80,000 of which are children and infants.

Economic Impact: The State would not be able to collect infant formula rebates of approximately $3,000,000 per month. Funding to 559 authorized vendors will be impacted by a system crash along with over $100,000,000 of annual Federal funding from the USDA. LDH states that WIC operations would be able to continue for approximately 30 days if PHAME is down before existing staff would be overwhelmed and supplemental staffing would be required.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2010	Federal = 100%	$2M-$5M

Key System: OS – Medical Assurance Trust Fund (MATF): Score = 5

Description: Used to send invoices to Intermediate Care Facilities and nursing homes for bed fees, and pharmacies for prescriptions filled. The system tracks balances due, and calculates interest and late fees per provider.

Social Impact:
At risk patients at facilities that receive supplemental funding from MATF would be at risk of losing care within the facilities. Potential degradation of services to constituents from undetermined potential lost efficiencies exist.

Economic Impact: If this system were to go down, the Fiscal Department would not be able to process these invoices. The estimated number of invoices per quarter on average is 2,700 and average number of statements sent is 250. The average amount of quarterly collections is $37.5 Million.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1988	30	1988	SGF = 100%	$100K-$500K

Key System: MEDS (Medicaid)*: Score = 5

Description: Primary application used to capture, determine, maintain and transmit Medicaid and CHIP data for 1+ Million Louisiana constituents receiving Medicaid services. MEDS as it stands is out of compliance with the Center for Medicaid Studies and is currently being rebuilt as Eligibility & Enrollment (E&E) on the new Enterprise Architecture and is slated for R1 release in Q1 FY2018. Healthy Louisiana is Louisiana's name for its new expanded Medicaid program, which provides health insurance coverage to more than 350,000 working Louisianans who could otherwise not afford health care. ***NOTE: MEDS is currently being rebuilt as LaMEDS and is scheduled for launch in Q1 FY2019.***

Social Impact: The Medicaid Eligibility system currently enrolls more than 5000 citizens every month and processes over 1,500,000 renewals annually and an inoperable system would prevent medical care to Medicaid recipients.

Economic Impact: Medicaid expansion program is bringing both jobs and economic development to the State.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1996	22	2016	Federal = 90% SGF = 10%	$100M-$150M

Key System: Medicaid Management Information System (MMIS): Score = 5

Description: Application that includes Title XIX program control and administrative costs; service to recipients, providers and inquiries; operations of claims control and computer capabilities; and management reporting for planning and control. There are several modules within MMIS including provider management, pharmacy benefit management, and is the fiscal intermediary for Medicaid claim submittal. The Medicaid Management Information Systems (MMIS) Division administers the contract and monitors the budget of the Medicaid Fiscal Intermediary (Molina), which is responsible for the payment of claims to providers and the timely and accurate reporting to State and Federal personnel and private sector partners.

The current MMIS is outdated and inefficiencies exist as it is difficult to implement changes and impacts CMS funding to maintain an aging and ineffective system. In addition, CMS is not investing any additional resources into changing/upgrading MMIS as it stands today.

Social Impact: The failure of MMIS has far reaching impacts including Medicaid recipients being denied services due to non-payment to participating doctors and pharmacies. MMIS processes 51 million medical claims annually for more than 30,000 Medicaid providers.

Economic Impact: Medicaid payments in excess of $8.3B including other financial impacts such as the loss of rebates on prescription drugs to the State are at risk with the failure of MMIS.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1980	38	2010	Federal = 90% SGF = 10%	$100M-$150M

Louisiana Economic Development (LED)

Key System: FastStart: Score = 3.5

Description: LED FastStart is a free service provided to qualifying companies operating in Louisiana and offers in-depth, world-class, custom employee recruitment and screening with hands-on assessments, as well as customized training for the complete operation. The training is both comprehensive and highly customized, covering specific processes and procedures as well as quality, organizational management and advanced technologies, and is supported with customized video, multiple digital platforms and graphic material. This media production system supports analyzing business needs, attracting top talent, evaluating and hiring the best candidates, and training the most skilled workforce to become highly skilled employees. LED FastStart is a discretionary incentive that is often a component of LED's incentive packages offered to companies and/or new business prospects. In other words, FastStart's successful track record of helping screen, evaluate and train workers is often a reason companies decide to locate and/or expand in Louisiana. LED FastStart has been named the No. 1 state workforce development program in the country for eight consecutive years by Business Facilities magazine. From the 2017 LED Annual Report document:

> *"…FastStart provides customized, turnkey recruitment and training products to new or expanding companies that meet an investment threshold. When a company is considering expansion in Louisiana, the FastStart team engages early to understand the company's culture, workforce needs and timeline. Since its launch, the program has created recruitment platforms that have attracted relevant applicants, and produced sophisticated training modules that have prepared more than 26,000 workers. In addition, FastStart has developed partnerships with Louisiana's secondary and higher education institutions that help ensure the state prepares generations of future employees in fields with high demand. The program has also established two key online portals, Louisiana Job Connection (LJC) and Louisiana Business Connection (LBC). LJC facilitates the job search process for candidates and employers, and LBC facilitates small business participation and growth…"*

Social Impact: The LED FastStart program assists businesses in creating new jobs for Louisiana workers which allows a better quality of life for them, their families, and their surrounding communities and these social areas of interest would be negatively influenced if FastStart was not available.

Economic Impact: Each eligible company must qualify to participate in the program. To qualify, a company must first commit to creating a net of at least 15 new, permanent jobs for manufacturing or distribution centers or a net of at least 50 new, permanent jobs for digital media, headquarters, R&D or inbound call center operations. These new jobs enable the workers to use their income to purchase goods and services from other Louisiana companies and to pay new taxes to fund crucial State services.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2009	9	2018	*FY18: EDF = 66% *FY18: SGF = 34%	$100K-$500K

**In FY 2019, FastStart funding is transitioning to 76% SGF and 24% STAT DED funding*

Louisiana Workforce Commission (LWC)

Key System: Automated Clearing House (ACH): Score = 5

Description: This is the bank routing information where monies are deposited from employers of the State. LWC receives a file from Chase with unemployment insurance (UI) tax payments and they are sent to the mainframe and processed and applied to the employers' record in the database.

Social Impact: This is a critical system that processes the UI tax payments. This is how taxes are received. If this was not available UI Claims could not be paid.

Economic Impact: ACH process UI payments annually of $194M, which would be delayed.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	1990	Federal = 100%	$500K-$1M

Key System: Mainframe Tax Processing: Score = 5

Description: Batch and online system to process all UI tax accounts and transactions, print letters, bankruptcy, employer status, field audit, liens, OWD, UI Monetary, Leg. aud., Human resources, file maintenance and R& S reports.

Social Impact: This is a critical system for Unemployment. This system is the source of record for UI tax operations. Without this system UI taxes could not be managed and claims could not be paid.

Economic Impact: Estimated tax payments per year are $166M (2017 numbers).

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	1990	Federal = 100%	$5M-$10M

Key System: Imaging System (IBM FileNet): Score = 4

Description: FileNet is the document management platform for the entire agency. This system is used by all aspects of the organization and is integrated into the various systems of record (Hire Unemployment System, Hire Workforce Development System, Office of WC Records Management System, Human Resources).

Social Impact: This is not a public facing application, but these records are critical to functions and processing of unemployment benefits, and other aspects of the agency.

Economic Impact: If FileNet fails the faxes would not work. They come in on a virtual server and are only visible in FileNet. In addition, without FileNet, LWC would be working from paper only. All supporting documentation would have to be received via regular mail or email. Some documents create work items which are queued to staff for completion. Without FileNet all of that goes away and LWC is required to work from physical sheets of paper on staff members' desks. Based on 2017, this is in excess of 13,000 items per month. The need to increase staff, or utilize overtime, would be required to keep production current.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2005	13	2011	Federal = 100%	$100K-$500K

Key System: Second Injury Board (SIB) – Claims Management System – Office of Workers Compensation: Score = 4

Description: Multiple departmental applications written in Microsoft Access (Legal, Workers Compensation, and Management & Finance). The access database that is used within the OWCA is the Second Injury Board's claim system. The program was developed in 1999 and hasn't been supported in over 11 years. The program is used as a claim system for the SIB. The staff records claim information including claim identifying fields, claim activity records and claim payment records.

Social Impact: Loss or compromise of this data could be detrimental to the operations of the Board and would result in substantial public image defacing.

Economic Impact: Claim information and payment information for claims totaling close to $60M per year are tracked in this system.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2000	18	2003	STAT DED = 100%	$2M-$5M

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Office of Group Benefits (OGB)

Key System: OGB Secure Website: Score = 4

Description: This is the secure website used by plan members and all agencies. The websites are used by ALL active and retired plan members and agencies to view their information, updates to rates, policies and procedures, deadlines, important notices, phone numbers, contacts.

Social Impact: Without the website, phone calls to customer service would become unmanageable. The agencies use this site to access the eEnrollment tool used when enrolling or modifying LaGov members' insurance information. About 245,000 plan members + staff of agencies use this website.

Economic Impact: Without timely and accurate electronic processing of transactions and automated billing, billing would not be done timely, the error rate could increase due to manual processing, the backlog and the lack of any type of reconciliation. Beneficiary payments for life insurance could be paid in error or delayed. Late vendor payments could result in no coverage for medicine and health care, therefore the health and welfare of OGB members could be placed in jeopardy. There would be an increased risk for fraud. Compliance with Federal and State regulations would be at risk. The source of the funds going to OGB are fees & self-generated revenues, which are derived from premiums collected from active and retired plan members and their employing agencies. This would negatively impact OGB with decreased cash flow if their funds are not received timely. To date (11-2017), the FY18 monthly average form fees and self-generated revenues is $109,734,475.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2002	16	2015	OGB fees Self-generated revenues derived from premiums collected from active and retired plan members and their employing agencies	$500K-$1M

Key System: IMPACT: Score = 4

Description: IMPACT is the repository and on-line system of all eligibility and enrollment transactions, event updates due to life events, reporting, and data processing of information for all plan members. Claims are also kept in IMPACT, received electronically from the insurers.

Social Impact: If IMPACT was non-operational, all eligibility and enrollment transactions, event updates due to life events, reporting, and data processing of information for all plan members would be incomplete, virtually non-existent except through paper forms from the time of the system failure until restoration. Providers would not pay claims or could pay claims in error if the information is incorrect. The

information, received from LaGov HR, Non-LaGov HR, and LSU, is initiated by the plan members and insurance companies. All processing would be done manually using the paper transactions received from the various entities. Processing would be completed in an untimely manner causing further wait time and risk of error. An example is a hospital calling for evidence of insurability and coverage. Now, using the online system IMPACT, an answer may be immediately given. This would not be the case with manual processing.

Claims are also kept in IMPACT, received electronically from the insurers. They would be forced to send paper forms, as well, to be worked manually. To sum it up, all changes, corrections, and billing will not only be untimely but risk of a high error rate will exist due to total manual processing. OGB and their customers would be negatively impacted by the delay possibly causing the inability to get medications and care needed. The risk of fraud increases dramatically, as well. All OGB plan members would be impacted (approximately 245,000).

Economic Impact: Without timely and accurate electronic processing of transactions and automated billing, billing would not be done timely, the error rate could increase due to manual processing, the backlog and the lack of any type of reconciliation. Beneficiary payments for life insurance could be paid in error or delayed. Late vendor payments could result in no coverage for medicine and health care, therefore the health and welfare of OGB members could be placed in jeopardy. There would be an increased risk for fraud. Compliance with Federal and State regulations would be at risk. The source of the funds going to OGB are fees & self-generated revenues, which are derived from premiums collected from active and retired plan members and their employing agencies. This would negatively impact OGB with decreased cash flow if their funds are not received timely. To date (11-2017), the FY18 monthly average form fees and self-generated revenues is $109,734,475.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2002	16	2015	OGB fees Self-generated revenues derived from premiums collected from active and retired plan members and their employing agencies	$5M-$10M

Office of Juvenile Justice (OJJ)

Key System: Juvenile Compliance: Score 3.5

Description: Juvenile Compliance is a Lotus Notes application that allows tracking and grading of juvenile facility compliance with State regulations. Specifically, it is used to track Juvenile - Secure Care Standards as required by State and Federal Standards.

Social Impact: It is very critical that the data is tracked in order to keep the agency in compliance with regulation set forth, mainly as a result of the Federal Consent Decree.

Economic Impact: Without the availability / functionality of this application the agency would potentially have to hire an additional 2-3 staff at each of the 3 facilities (avg. salary of $65,000 per staff) to manually track the information / data required to meet the standards.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2000	18	2010	SGF = 100%	$49K-$100K

Key System: Juvenile Electronic Tracking System (JETS): Score = 3.5

Description: Juvenile Electronic Tracking System. OJJ is required by State and Federal Law to have a mechanism to track youth across the State or Louisiana.

Social Impact: If this system were to fail, it would pose a Public Safety Risk.

Economic Impact: If this system were to fail, it would likely require additional staff and additional hours worked in order to track youth throughout the system (secure care, non-secure care, supervision, etc.). Potential undeterminable economic impact due to efficiencies lost exist.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2009	9	2016	SGF = 100%	$49K-$100K

***NOTE: The majority of all of the applications in use by OJJ, whether in the "Key Findings" or "Remaining At Risk" sections of this response or in the OTS applications inventory, could be combined into a single Offender Management System (OMS). This platform can be a COTS application or custom development.**

STATEWIDE/Division of Administration (DOA)

Key System: ISIS Advantage Financial System (AFS): Score = 3.5

Description: The AFS system is the financial system for the State agencies and disburses State funds, thus vendors providing goods and services to the State receive payment. CGI Advantage ISIS has been the primary ERP system for the State since the mid-90s. It contains three core module - AFS which is the State's core accounting, CFMS which is the State's core Contract system, and AGPS which is the State's core Procurement system. In FY 2008-2009, the State began the migration to an SAP ERP system. At this time, 5 full Departments have been migrated from the legacy ISIS system and the CFMS and AGPS modules have been put into legacy mode. Current plans are to migrate multiple additional departments to the SAP ERP in FY 2018-2019 contingent on the level of funding. It is of note that ISIS, due to its older technology is significantly more difficult to upgrade/modify. Due to the difficulties of integrating the data between the two ERP systems (ISIS and SAP ERP), this places constraints blocking many goals of the State, as well as creating a very clear risk. It is, therefore, critical to conclude the SAP migration as soon as funding allows.

Social Impact: As the legacy core accounting system for the State, the impact of system failure would be significant. Payments to individuals, vendors and contractors could not be made. Procurement could be impacted. This would rapidly cause serious slowdowns for basic functions of State government. At the higher levels, prolonged outages could hamper CAFR production which ultimately could impact the State's bond rating. Federal matches could be affected since the system produces information required by the Fed. All of this could impact the services that State government provides to Louisiana's citizens. While the potential impacts are difficult to quantify, they could be far reaching and severe.

Economic Impact: As the legacy core accounting system for the State, the impact of system failure would be significant. Payments to individuals, vendors and contractors could not be made. Procurement could be impacted. This would rapidly cause serious slowdowns for basic functions of State government. At the higher levels, prolonged outages could hamper CAFR production which ultimately could impact the State's bond rating. Federal matches could be affected since the system produces information required by the Fed. All of this could impact the services that State government provides to Louisiana's citizens. While the potential impacts are difficult to quantify, they could be far reaching and severe.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1996	22	1998	SGF = 100%	$20M-$50M

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REMAINING AT RISK PLATFORMS: BY AGENCY

AGENCY SUMMARY

As described in the Executive Summary, major or highlighted at risk applications that scored a 3.5 or higher would be highlighted in Key Findings section with the remaining at risk applications with a score of 3.5 or higher would be identified within the Agency Summary section. While these applications should not be considered "less at risk", they are simply not being highlighted by the appropriate agency for key findings.

DCFS

Application: Billing and Tracking System (BATS): Score = 5

Description: The Billing and Tracking System (BATS) is composed of online data capture modules and batch procedures which provide cost allocation for personnel time, trouble ticket time and hardware utilization cycles. This system is composed of on-line data capture modules and batch procedures which compile information on personnel time allocated and expended.

Social Impact: At time of report, DCFS and OTS are determining the social impact and active status for BATS.

Economic Impact: BATS generates no revenues for the agency. BATS system failure, however, could result in the agency's inability to properly allocate its costs across the various program grants, resulting in inaccurate Federal reporting, which could subsequently impact access to Federal funding for non-compliance issues.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1979	39	2015	SGF = 100%	$2M-$5M

Application: DCFS Client*: Score = 5

Description: DCFS Client provides DCFS staff access to client/case information via online inquiry with read-only access to identify clients receiving DCFS services in 21 program areas. The application resulted in the integration of the Centralized Clearance and the Interim State Identification Issuance System adding a higher degree of client tracking and security of access to client/case information. ***NOTE: This application is slated to be decommissioned in Q1 FY2018 and will be replaced with functionality from LaMEDS.***

Social Impact: If DCFS Client were to fail, staff would need to access other systems to access client/case information across 21 program areas, delaying the timelines within which they can provide services to clients.

Economic Impact: Failure of the system could delay processing of files, which could result in the loss of $58M in FNS Administrative funding for non-compliance.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1986	32	2015	Federal = 100%	$100K-$500K

Application: Job Opportunity and Basic Skills Training Program (JB)*: Score = 5

Description: Aid JOBS field case managers in their assistance to TANF clients in their effort to become self-sufficient by access to education, job readiness, job skills, training, job search, on-the-job training, and community work experience. ***NOTE: This application is set to be decommissioned and replaced with Integrated Eligibility in FY 2019.***

Social Impact: The application provides a payment mechanism for supportive services to participants so they can achieve self-sufficiency. Program participants receive a monthly stipend and the failure of the application would prevent DCFS from making the supportive payments to program participants.

Economic Impact: This application does not impact revenue generation, but it does fulfill program requirements for the annual TANF (Temporary Assistance for Needy Families) grant. If this application were to fail, the agency would be in jeopardy of losing the TANF grant due to non-compliance and the annual TANF grant is valued at $163,971,985.00.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1994	24	2015	SGF = 100%	$75M-$100M

Application: LAMI Ad-Hoc Reporting (LAHR): Score = 5

Description: The LAMI Ad-Hoc Reporting (LAHR) application allows any authorized user to create and ad-hoc, non-standard report of "real time" LAMI case data providing either case-level details or a count/total.

Social Impact: A failure in the LAHR application would have very little impact to the Agency. DCFS staff uses LAHR for real-time access to SNAP and TANF data that is available in a batch report the following day. Therefore there is potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: DCFS staff would be able to access LAHR-supplied information through batch reports that are available the day following LAMI input. Therefore there is potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1992	26	2015	Federal = 50% SGF = 50%	$100K-$500K

Application: Bureau of Licensing Application System (BLAS)*: Score = 3.5

Description: This application establishes and maintains information relating to the licenses for all childcare and/or social care programs. Additionally, the information gathered during licensing inspections is stored in BLAS. ***NOTE: The system is slated to be decommissioned in Q1 FY2019 and replaced with SansWrite X Web Application Framework.***

Social Impact: BLAS provides the templates for field inspections of child day care centers, child residential homes, child placing agencies, maternity homes and juvenile detention facilities. Should BLAS fail, the Department would no longer be able to access facility licensing information or any actions associated with licensing.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1999	19	2017	Federal = 100%	$100K-$500K

NOTE: BLAS is used by both DOE and DCFS. While DOE is using BLAS for Early Childhood programs, DCFS uses BLAS for Child Welfare clients.

Application: Bureau of Appeals*: Score = 3.5

Description: This application establishes and maintains cases where citizens have appealed administrative decisions regarding services provided by DCFS. The system tracks case information, generates letters, and produces statistical reports. It is also used to track case status after cases have been sent to Division of Administrative Law for hearings. ***NOTE: This application is set to be decommissioned and replaced with Integrated Eligibility in FY 2019.***

Social Impact: Benefits such as SNAP, FITAP, and KCSP could be erroneously withheld from constituents if the application fails and fair hearing appeal requests could not be processed. Additionally, clients who should be classified as ineligible to receive benefits may receive such benefits if the application failed, preventing the Dept. from processing requests for Administrative disqualification hearings. Ultimately,

issues caused by the failure of this application could result in a loss of Federal funding for the department due to non-compliance with Federal regulations.

Economic Impact: Issues caused by failure of this application could result in a loss of Federal funding for the department due to non-compliance with Federal regulations in addition to potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1998	20	2012	Federal = 92% SGF = 8%	$100K-$500K

Application: Centralized Bank Reconciliation (CR): Score = 3.5

Description: This application is the standardized system to handle reconciliation of all DCFS bank accounts. Each program that writes checks creates interface files for the bank reconciliation system. These files contain information for checks that are issued, cancelled, voided, and/or replaced. The banks also provide interface files containing the paid check information. All interface files are used to update check information stored on the bank recon master file. A history file is maintained to allow users to view the disposition of all checks. Monthly reconciliation reports and annual paid analysis reports are produced for the fiscal section

Social Impact: This application submits check data to the bank for all DCFS subsystems (TIPS, LASES, JAS and DDS), if the application would experience an outage, the bank could not verify the validity of checks presented by clients and providers.

Economic Impact: This application generates no income for the department and, if it were to fail, would not impact funding. Average monthly payments to clients for the subsystems listed above total $8,654,473 and those payments would be interrupted as long as CR is out of service.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1999	19	1999	Federal = 100%	$100K-$500K

Application: DCFS Recovery Accounts System (RAS): Score = 3.5

Description: This application maintains loss histories for bad debts owed to the start for 10 welfare programs. The primary purpose of the system is to process monies collected from clients to repay over-issuances they received from any of the welfare programs maintained by the RA system, including SNAP, TANF, Support Enforcement, Medical Vendor Payments, and Disaster Relief.

Social Impact: RAS failure would make it impossible for DCFS to have an accurate view of how much money is owed by each client who had received an over-payment.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1997	21	2017	Federal = 84% SGF = 16%	$1M-$2M

Application: Disability Determination System (DDS): Score = 3.5

Description: DDS is a batch system that produces checks and remittance advices for the Office of Disability Determination Services and payroll reports / files using data from ISIS HR. Checks and remittance advices are printed for the Office of DDS with payroll reports and payroll file are generated using data from ISIS HR. The previously submitted material is taken straight from the system documentation.

Social Impact: The failure of this system would result in the agency's inability to provide disability checks to the client population, which relies on these payments for their support.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1998	20	1998	Federal = 50% SGF = 50%	$100K-$500K

Application: Family Resource Center (FRC): Score = 3.5

Description: This application was built to empower families to attain self-sufficiency and ongoing independence. Family resource center provides financial help to poor families. FRC has contractors at different locations in the State. Contractors enter data into web-based screens form paper applications to support their work.

Social Impact: The application collects data on family-based interventions offered to families in an effort to prevent out of home placement of children, promote reunification efforts for children in out of home care, and to support adoption and permanency efforts.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2006	Federal = 100%	$100K-$500K

Application: Interstate Compact for Placement of Children (ICPC): Score = 3.5

Description: ICPC provides adoption placement services. The Child Welfare Adoption Program seeks adoptive home placement of children who are in the DCFS custody and are legally free for adoption. The system allows staff to enter adoption request information into a web-based system.

Social Impact: The ICPC database is vital for tracking children who are in foster care and placed in Louisiana from other states and for Louisiana children placed in other states. If the system were to fail, DCFS would lose its ability to track the location and progress reports of the children that are currently in its database.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1998	20	1998	Federal = 100%	$100K-$500K

Application: ISIS Interface: Score = 3.5

Description: Receives financial information from all DCFS programs that generate payments. The ISIS Interface application is used to record DCFS subsystem (LAMI, TIPS, JAS and DDS) expenditures in the State's financial system of record (ISIS).

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: If the ISIS Interface application would fail, DCFS subsystem expenditure information would not be accurately populated in ISIS, directly resulting in inaccurate financial reports and Federal grant reports that are generated through ISIS.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1997	21	2015	Federal = 92% SGF = 8%	$100K-$500K

Application: LAMI Web Case Inquiry: Score = 3.5

Description: This interface to the LAMI system that works as a search engine. The interface is slated to be decommissioned in January 2018.

Social Impact: Not applicable

Economic Impact: Not applicable

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2005	13	2005	SGF = 100%	$49K-$100K

Application: LASES Web: Score = 3.5

Description: LASES WEB is a web-based front end system for LASES that houses the customer message center that supports client self-service. This application keeps up to date with the legacy mainframe LASES and streamlines the processes for a higher level of user experience.

Social Impact: The DCFS Customer Service Center relies on LASES Web to respond to customer inquiries, taking approximately 35,000 - 45,000 calls monthly. Failure of the system would inhibit the ability of DCFS to interface with its client population of 562,858 constituents and their children.

Economic Impact: Loss could result in the loss of 1 - 2% of the TANF Block Grant for program non-compliance.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2004	14	2015	SGF = 66% Federal = 34%	$49K-$100K

Application: State Online Query (SOLQ)*: Score = 3.5

Description: This application provides the State Human Services agencies with online access to the Social Security Administration enumeration service, Title II and Title XVI benefit data. ***NOTE: This application is set to be decommissioned and replaced with Integrated Eligibility in FY 2019.***

Social Impact: SOLQ provides DCFS staff online access to SSA's enumeration verification service, Title II and Title XVI benefit data. SOLQ is an enhancement of the SIEVS system in that it is restricted to queries only, resulting in efficiencies for program staff.

Economic Impact: Failure of the system could delay processing of files, which could result in the loss of $58M in FNS Administrative funding for non-compliance.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2002	16	2002	Federal = 50% SGF = 50%	$100K-$500K

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DOA

Application: GUMBO: Score = 3.5

Description: Used for grants compliance monitoring for CDBG grant recipients. Louisiana receives Federal funds from HUD each year. A portion of this money goes to administration of the CDBG program, including payment for this application.

Social Impact: Louisiana provide funds for improvements to public infrastructures in order to provide safe, sanitary living conditions to the citizens of Louisiana. CDBG funds must be used to primarily benefit low to moderate income citizens. GUMBO is used for grant administration and to track benefits of the program. Without GUMBO, service delivery could be severely hampered.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2000	18	2010	Federal = 100%	$500K-$1M

Application: Louisiana.gov Website: Score = 3.5

Description: Official website for the State of Louisiana government.

Social Impact: Citizens of the State of Louisiana use the Louisiana.gov State government portal page as a starting point to locate services within State government, including links to emergency services. While difficult to quantify the impact of the States portal page being unavailable, prolonged outages of the State's primary web presence could negatively impact constituents and would certainly reflect poorly on the State. In addition, there are known security issues and there is no backup/alternative in place.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2005	13	2005	SGF = 100%	$100K-$500K

Application: LAPAC: Score = 3.5

Description: LaPac is utilized by the State to procure goods and services by advertising bid opportunities via vendor email notification and a public website. It also provides State Contract Search capabilities for use by State agencies, local governments, colleges/universities and vendors.

Social Impact: Businesses within the State could be affected by lack of ability to identify potential bid opportunities to provide goods/services to the State. This could also impact Louisiana Economic Development business initiatives

Economic Impact: The cost of State government procurement could be increased due to decreased responses to the State's requests for bids. Lack of public availability of State contracts could also result in higher costs of procuring goods and services. It is these potential inefficiencies that create potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2001	17	2012	SGF = 100%	$2M-$5M

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DOC

Application: LUCI: Score = 3.5

Description: LUCI (Louisiana Unified Corrections Interface) was designed in Lotus Notes, by IT staff at Rayburn Correctional Center during the mid-2000s to manage its offender and facility data. The decision was made in 2006 to export the system to the other Institutions. The system was given the name LUCI (Louisiana Unified Corrections Interface) to signify the Department's initiative of having a single unified system that will allow all Institutions to electronically share offender information. Each Institution has a local copy of the one LUCI system. Having a local copy takes advantage of NOTES' distributive capabilities. It is the same approach used for email and the P&P Case Management system. Any disruption in the telecommunications services between an Institution and Baton Rouge does not affect the operation of the Institution's local LUCI copy. Some Institutions still rely on database systems that were developed in other applications (Microsoft Access, FoxPro, UltraPlus, etc.) and process data not housed in LUCI. All of these systems, including LUCI, are used to maintain offender counts and manage Institutional processes and workflows.

Social Impact: Social impacts of failure would result in DPS being unable to issue credentials until replacement system could be put in place.

Economic Impact: The failure of the LUCI computer system would result in DOC Adult facilities having to resort to using paper-based replacements and bringing in additional staff to continue operations. The extent of the outage would dictate the level of the impact. Short term outages will incur overtime costs by having to bring in additional security staff to operate on paper based operations. Other areas, such as medical, would be limited due to most of DOC scheduling and tracking software being part of LUCI. Visiting processing would be limited and require additional staff to process visitors. Longer outages will result in having to hire additional staff to sustain ongoing operations. Efficiencies realized from automation over the years have resulted in being able to use fewer staff to accomplish the same job as staffing levels have been reduced over the years. For example, DOC Control Center required three staff on each day shift to operation before any automation was introduced and now requires two with the use of LUCI automation. DOC would estimate needing a 5% increase in security staffing to accomplish the same work as DOC is now accomplishing with the use of the LUCI system.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2005	13	2011	SGF = 100%	$49K-$100K

DOE

Application: Technology Readiness Tool (TRT): Score = 3.5

Description: Technology survey taken by the districts to assess their technology readiness. All schools across the State use this application to determine if they are able to meet readiness standards to support State/Federal mandated testing and accountability. Reports from this system are also required to be submitted to the legislature by State Law.

Social Impact: Schools who are not technically ready, would be unable to support mandated State online testing. Students who are unable to test, would have their grades impacted as well as schools and district accountability scores will be impacted.

Economic Impact: Schools/Districts would lose both Federal and State funding tied to school accountability where scores were dismissed due to the inability to provide adequate technology for mandated online testing.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2011	7	2014	SGF = 100%	$100K-$500K

Application: Totally Automated Security (TAS): Score = 3.5

Description: TAS is a custom built identity management solution that allows security coordinators at the school districts, charter schools, LEAs, etc. to create user accounts, manage their access to various DOE data applications, and reset passwords.

Social Impact: Without this system, no users would be able to authenticate/gain access to any of the LDOE data systems. No schools or districts across the State would be able to submit, update or export data from LDOE's State data systems.

Economic Impact: Potential loss of all Federal and State dollars associated to requirements of data collection.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2007	9	2014	SGF = 100%	$100K-$500K

Application: Password Reset System (PRS): Score = 3.5

Description: This application works in conjunction with TAS to allow users to reset their own passwords.

Social Impact: Without this system, users and system administrators across the State would not be able to update user passwords. Users would have to contact OTS to manage and update all (30,000+) accounts for users of LDOE's data systems.

Economic Impact: State would need to hire additional personnel to manually support statewide user base at an annual cost of approximately $300-$500K.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2007	9	2014	SGF = 100%	$100K-$500K

Application: Educational Support Programs (ESP): Score = 5

Description: ESP is the original grants management system that is being moved to Electronic Grants Management System. DOE uses this system to approve grant payments to the school districts. Only one grant is left in the system and is less than $100,000. No more new grants will be going into ESP.

Social Impact: EGMS will be handling all new grants and the grant closes out on 3/15.

Economic Impact: After 3/15/2018, there will be no economic impact by the loss of ESP and it will be queried for historical information only.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1992	26	2000	SGF = 100%	Not Applicable

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DOTD

Application: LaPave: Score = 4

Description: This application has been approved for creation and will revamp old Excel mix design spreadsheet to web-based application with public interface for contractors (producers/suppliers). It will be used to manage asphalt and concrete mix designs. It will also centralize mix design and QC/QA for asphalt and concrete projects. LaPave will centralize the data in a single data management structure. The application being web based, the users will have mix design and reporting availability via internet, as well as enhanced communication between users of different agencies. Having the data structured as such will allow for reporting of historical data, as well as, reporting statistical analytics to assist with data driven decision making related to materials.

Social Impact: The current solution is wrought with inefficiencies and a new web-based application will enhance the State and contractor experience and provide better visibility into the road construction projects tracked with the application.

Economic Impact: Potential undeterminable economic impact due to efficiencies gained by replacing the existing Excel driven process.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2018	0	2018	SGF = 100%	$100K-$500K

Application: ESTI – Estimates: Score = 5

Description: Application used for construction estimates. Replaced by SiteManager.

Social Impact: The system today is not being used on any active project. The system is still used on rare occasions to view archive information. Funding is from the general budget.

Economic Impact: Used for historical data retrieval only. Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1983	35	2008	STAT DED = 100%	$0-$49K

Application: TATA – Traffic Accidents: Score = 5

Description: Supports DOTD in analyzing crash data and is used for historical purposes only.

Social Impact: The system today is not being used on any active project. The system is still used on rare occasions to view archive information.

Economic Impact: Used for historical data retrieval only. Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1975	43	1999	STAT DED = 100%	$0-$49K

Application: Bid Letting System (BIDS): Score = 3.5

Description: Bid Letting Highway Construction Projects application that DOTD no longer. It was replaced with AASHTOWare Project (formerly known as Trns*Port & AASHTOWare Project Bid) and BIDS is for historical use only.

Social Impact: The system today is not being used on any active project. The system is still used on rare occasions to view archive information.

Economic Impact: Used for historical data retrieval only. Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1975	43	1999	STAT DED = 100%	$0-$49K

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DPS

Application: Appropriation Codes: Score = 5

Description: This application keeps a list of appropriation codes used and maintained by DPS Management & Finance (MFN).

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Detrimental to timely classification and therefore availability of approximately $1.4B annually.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1995	23	2012	STAT DED = 100%	$49K-$100K

Application: Indian Gaming System BIS System: Score = 5

Description: Indian Gaming tribe, casino, officer, employee, vendor, equipment and event records.

Social Impact: Could cause temporary disruption at the Indian Casinos around the State. The Casinos would be unable to electronically access vendor and employee records.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2008	STAT DED = 100%	$100K-$500K

Application: Liquefied Petroleum Gas System BIS System: Score = 5

Description: LPG permit and license information for dealers, producers, transporter, installers, employees, equipment, and vehicles in LP Gas business.

Social Impact: Legacy application that is used for historical data retrieval and does not impact current LPG businesses.

Economic Impact: Used for historical data retrieval only. Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2008	STAT DED = 100%	$100K-$500K

Application: Central Gaming Registry: Score = 4

Description: Tracks companies registered with gambling/gaming licenses.

Social Impact: Failure could cause temporary disruption at the casinos around the State. Casinos would be unable to view list of approved vendors.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2001	17	2014	STAT DED = 100%	$49K-$100K

Application: LSP CH Address Changes: Score = 4

Description: Collects the Change of Address Forms from the LSP website and mails a copy to Concealed Handguns section. This category was a one-time request to modify a workflow within the within the Concealed Handgun Permit database. It simplified procedures within the office.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2012	STAT DED = 100%	$49K-$100K

Application: LSP Suspicious Activity Web Reports: Score = 4

Description: Allows the public to submit "Suspicious Activity" forms via the LSP website and notifies ISS personnel.

Social Impact: The public will not be able to submit an electronic "Suspicious Activity" form via the LSP website. This would require a call to the LSP homeland defense hotline toll-free number.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2005	13	2011	STAT DED = 100%	$49K-$100K

Application: LSP Tow and Recovery Licensing: Score = 4

Description: This database provides a place for members of the Towing and Recovery personnel at TESS to enter Towing and Recovery Company and Storage Location information. Once a storage location has been entered and fees collected, licenses can be generated and printed.

Social Impact: The public would not be able to identify where their vehicles have been towed/stored and the associated fees. In addition, towing and recovery businesses would not be able to join or renew their licenses as authorized towing and storage vendors.

Economic Impact: Approximately $91,000 are collected via fees and or licenses annually.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2016	STAT DED = 100%	$49K-$100K

Application: Networked FTO Evaluation: Score = 4

Description: Evaluation reports for the FTO (Field Training Officer) program used by Louisiana State Police and Department of Public Safety Police.

Social Impact: Generates reports from the Field Training Officer program for Department of Public Safety Police and Louisiana State Police. The evaluation ability for LSP troopers and DPS officers in the field to determine their preparedness would be inefficient.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2003	15	2016	STAT DED = 100%	$49K-$100K

Application: OMV Contact Us: Score = 4

Description: Allows the public to submit questions to OMV and allows OMV to respond from a generic account.

Social Impact: Inability for customers to submit questions and receive answers via email through this portal would increase the volume of phone calls and/or increase the number of visits into an OMV offices. This could cause frustration to the citizens of this State as well as increasing complaints regarding wait time both in an office as well as on the phone lines.

Economic Impact: Inability for customers to submit questions and receive answers via email through this portal would increase the volume of phone calls and/or increase the number of visits into an OMV offices which may require additional staff.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2005	13	2016	STAT DED = 100%	$49K-$100K

Application: Parish and Municipal Tax Reports: Score = 5

Description: Displays reports to Parish and Municipality officials regarding tax percentage information.

Social Impact: Inability to access this system would prevent the Parish and Municipality officials from reviewing and making the necessary corrections to the report.

Economic Impact: System unavailability would impact accurate collections and disbursement of the associated taxes.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1995	23	2010	STAT DED = 100%	$49K-$100K

Application: Parish Tax Table: Score = 5

Description: This application keeps a record of parish and municipality tax percentages, along with when they expire.

Social Impact: Inability to access this system would prevent the Parish and Municipality officials from reviewing and making the necessary corrections to the report.

Economic Impact: System unavailability would impact accurate collections and disbursement of the associated taxes.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1995	23	2012	STAT DED = 100%	$49K-$100K

Application: Web Registration: Score = 4

Description: This application controls the approval of requested user ID's to the Tier II system (Motor Carrier and HAZMAT).

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1998	20	2012	STAT DED = 100%	$100K-$500K

Application: Case Tracking System: Score = 3.5

Description: This database provides a place to which members of the Management & Finance Legal Section can input data to create, edit and manage their case files with ease and accuracy. A calendar feature has also been implemented into this database so that others within the organization.

Social Impact: For all legal matters assigned to Office of Legal Affairs (OLA) a file is opened in the OLA Case Tracking system. OLA employees use the system to locate and manage open files, and to identify files for

destruction in compliance with the retention schedule. If the current Case Tracking system were eliminated a new system would have to be developed to take its place.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2005	13	2016	STAT DED = 100%	$49K-$100K

Application: Casino Licensee Info: Score = 3.5

Description: The primary function of the database is to store data and information about the casinos in one location for Gaming Audit / IT to get at quick and easily.

Social Impact: This is an internal facing database. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2004	14	2014	STAT DED = 100%	$49K-$100K

Application: Criminal Investigations: Score = 3.5

Description: Criminal investigation case database used by LSP, Baton Rouge Narcotics, and Detectives personnel to track criminal investigation cases.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2008	10	2010	STAT DED = 100%	$49K-$100K

Application: Critical Incident Management: Score = 3.5

Description: Provides links for all other EOC applications at DPS.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2012	STAT DED = 100%	$49K-$100K

Application: Daily Activity Reports: Score = 3.5

Description: (1) LSP Officer Daily Activity Reports prior to move to Lotus Notes based system. (2) Criminal History Background/Fingerprint fee accounting records prior to being moved to Lotus Notes based system and Funds Collection. (3) Requisition Trkg (Bldg & Grounds)

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2008	STAT DED = 100%	$100K-$500K

Application: Daily Deposits: Score = 3.5

Description: This application provides a place for the members of the Office Motor Vehicles to enter daily bank deposit information. It allows Financial Services to keep a record of deposit information from each site.

Social Impact: Inability to use this system would cause OMV and OMF major problems with balancing and could cause delays in funding being received and also deposited into proper accounts. From an auditing perspective financial records are very important to the department and are needed to enforce accountability for funds.

Economic Impact: Correct daily reconciliation of deposits would be impacted, however still be able be managed by OMV personnel and therefore there are potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2011	7	2015	STAT DED = 100%	$49K-$100K

Application: Emergency Contact: Score = 3.5

Description: Emergency Contact numbers for various other agencies.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2003	15	2010	STAT DED = 100%	$49K-$100K

Application: EOC Personnel Management: Score = 3.5

Description: Tracks mission, lodging, etc. for other agencies that assist LSP during emergencies. Also stores non-commissioned employees that need to be assigned via a desk log.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2005	13	2014	STAT DED = 100%	$49K-$100K

Application: EOC Situation Report: Score = 3.5

Description: Tracks events, maps, troop statuses, etc. and builds Situation Reports and Briefing Notes for the EOC.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2016	STAT DED = 100%	$49K-$100K

Application: Gaming Revenue Reports: Score = 3.5

Description: Gaming Summary Revenue Reports for viewing via the LSP and LGCB websites.

Social Impact: If system failure occurs, the industry and public would be unable to access the revenue reports.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2002	16	2011	STAT DED = 100%	$49K-$100K

Application: IRS: Score = 3.5

Description: Incident Reporting System collects, stores and reports on critical investigative data. This system allows for secure online access to LSP detectives and analysts.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2002	16	2002	STAT DED = 100%	$500K-$1M

Application: Juvenile ARPS: Score = 3.5

Description: Tracks youth complaints to DPS administration.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2000	18	2010	STAT DED = 100%	$49K-$100K

Application: Latent Print: Score = 3.5

Description: Allows Crime Lab users to view Basic, Evidence, Suspect, Victim, Remarks records related to a Latent Print.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2005	13	2010	STAT DED = 100%	$49K-$100K

Application: LSP Applied Tech Crime Lab BIS System: Score = 3.5

Description: Application that tracks 1) Intoxilyzer 5000 certification records for both Officers and equipment and (2) Criminal Evidence records.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2008	STAT DED = 100%	$49K-$100K

Application: LSP Asset Forfeiture, CATCH, Training Academy BIS Systems: Score = 3.5

Description: Application that tracks (1) Information of seized and forfeited property. (2) Incident, evidence intelligence tracking records. (3) Trooper training records prior to move to Lotus Notes based system.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2008	STAT DED = 100%	$49K-$100K

Application: LSP Concealed Handguns, Motor Carrier, Towing, Explosives, TESS Activity Reports BIS Systems: Score = 3.5

Description: Application that tracks 1) Concealed Handgun Permit records prior to move to .Net based system. (2) Commercial Vehicle Inspection records prior to move to Lotus Notes based system. (3) Towing Facility/Vehicle permit, citation and employee records prior to move to Lotus Notes based system.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2008	STAT DED = 100%	$49K-$100K

Application: LSP Expungements: Score = 3.5

Description: This database provides a way for the LSP Expungement & Legal Sections to enter Expungement Receipt Log information and create letters.

Social Impact: Without this database to log and track Court Ordered Expungements, constituents would experience significant delays in the processing of Orders.

Economic Impact: Expungements generated approximately $1.5M in calendar year 2016 by processing 4186 expungements at a cost of $250 each. Outside funding would not be impacted.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2016	STAT DED = 100%	$49K-$100K

Application: LSP Land based Gaming, Riverboat Gaming BIS Systems: Score = 3.5

Description: This application tracks Land based Gaming System records prior to move to LIGHTS. (2) Riverboat Gaming System records prior to move to LIGHTS.

Social Impact: System only contains historical records and could possibly affect the agency's ability to respond to public record requests for historical information.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2008	STAT DED = 100%	$49K-$100K

Application: LSP Online Training Reg.: Score = 3.5

Description: Allows the public and LSP employees to register for classes that have been scheduled by LSP.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2005	13	2015	STAT DED = 100%	$49K-$100K

Application: LSP TR Insp Violations: Score = 3.5

Description: The purpose of this database is to contain the Towing and Recovery records that were created from 1990 to 2001 which have outstanding balances. When payment is received on a violation created within this date range, authorized Towing and Recovery personnel.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2010	STAT DED = 100%	$49K-$100K

Application: LSP Vehicle Pursuit Report: Score = 3.5

Description: This database provides a place to which members of Louisiana State Police can input data to create, edit and manage vehicle pursuit reports.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2003	15	2016	STAT DED = 100%	$49K-$100K

Application: LSP Witness Fees: Score = 3.5

Description: Allows LSP to track witness fees associated with court subpoenas.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1999	19	2012	STAT DED = 100%	$49K-$100K

Application: Mapper Automated Refunds: Score = 3.5

Description: Allows OMV/Finance to issue refund checks to customers and businesses. OMV no longer uses the Mapper database to enter/process refund information. OMV began using the web based program in July 2017.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2015	STAT DED = 100%	$49K-$100K

Application: MCSAP System: Score = 3.5

Description: The MCSAP (Motor Carrier Full) database on is where Commercial Motor Vehicle Inspections and Violations are stored for the creation of letters, hearings, and the acceptance and posting of civil penalty fines to violations for Drivers, Carriers and Shippers. There is also a MCSAP Subset database that contains MCSAP Inspections and Violations that occurred within the most recent 160 days (six months). Also within the MCSAP Subset database, hand-keyed reports, new regulations and updates, new carriers and updates occur in this database and are then replicated to the MCSAP Full database.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost such as identifying drivers, carriers and shippers that have been inspected and the violations that are owed to the department as well generating letters and hearing information to be sent out and tracked.

Economic Impact: From 7/1/16 thru 6/30/17 the revenue for MCSAP System was estimated at $6 million for Motor Carrier, Towing, and Weights violations.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1999	19	2012	STAT DED = 100%	$500K-$1M

Application: MorphoTrust Driver's License: Score = 5

Description: 3rd party system which provides the software, cameras, driver's license printers, and secured laminate required to create and print the actual credential both in OMV and PTA offices.

Social Impact: Inability to print or issue credentials that are used by several entities including law enforcement to identify LA citizens as well as identifying the level of privileges to operate motor vehicles in this State and other states across the US. This will affect the Commercial Licensing program and gasoline industry.

Economic Impact: Would prevent citizens from being able to operate motor vehicles and will hugely affect revenue and commerce in this State. Potential undeterminable economic impact due to efficiencies lost exist.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1990	28	2016	STAT DED = 100%	$5M-$10M

Application: NSF Checks: Score = 3.5

Description: This system keeps information on individuals and businesses that write NSF checks to DPS.

Social Impact: The inability to access this system would cause an issue with identifying customers who have written NSF checks to the department as well as collection of monies owed to the department due to an NSF check. When an NSF check is written to OMV the driving and or registering privileges are suspended/revoked until payment has been made and inability to access the system would delay the collection and reinstatement process causing frustration for customers.

Economic Impact: DPS collected $228,791.64 for 2016-2017 and loss of the application will cause delays in the collection of this revenue.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2004	14	2016	STAT DED = 100%	$49K-$100K

Application: OMV Customer Correspondence: Score = 3.5

Description: Application that creates OMV custom letters.

Social Impact: Inability to access this system would have an impact on employee productivity as rather than using form letters that allows employees to select preapproved verbiage and filling in the blanks where necessary, the employee would have to type out everything and print out a copy to be mailed as well as a copy to be scanned and stored into the content manager database.

Economic Impact: Currently the correspondence letters are stored electronically saving the extra step of printing the extra copy and also having an employee to scan. This may require additional staff to scan as well as additional supplies to print the documents.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2004	14	2015	STAT DED = 100%	$49K-$100K

Application: OMV D/C File Transfer: Score = 3.5

Description: Transfers files for the OMV Stored Vehicle application back and forth from Notes to the Unisys mainframe.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2010	8	2012	STAT DED = 100%	$49K-$100K

Application: Permissions: Score = 3.5

Description: Application to verify user access to State Fire Marshal SMART system.

Social Impact: Inability to use this system would prevent completion and approval of some outstanding projects in SMART and inability to research and link projects and licenses to the web-based Fire Marshal Information Management System.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1999	19	2010	STAT DED = 100%	$49K-$100K

Application: Rap Sheet System: Score = 3.5

Description: This application manages the dissemination of criminal history information. Pulls State criminal rap sheet from a file directory, puts them into emails and sends them to the appropriate location based on the rap sheet Portal.

Social Impact: Constituents requiring a background check for civil purposes would be negatively impacted. The ability for criminal justice agencies to protect and serve constituents would be negatively impacted.

Economic Impact: The release of this data for civil purposes generated approximately $8.2M in 2017. Federal grant monies managed by LCLE are tied to the criminal history data collected, stored and disseminated by CCH and may be negatively impacted.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2004	14	2004	STAT DED = 100%	$49K-$100K

Application: RTK Enforcement: Score = 3.5

Description: This database provides a place to which members of the Right-To-Know staff may enter Right-To-Know, Hazardous Materials, and Underground Utility violations, letters, and hearings.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2001	17	2013	STAT DED = 100%	$49K-$100K

Application: SAR Insurance: Score = 3.5

Description: Provides a way for the Gaming Enforcement to generate a SAR (Significant Action Report) Number to track their activities.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2016	STAT DED = 100%	$49K-$100K

Application: State SOCPR: Score = 3.5

Description: Provides a way for the LSP Criminal History & Legal Sections to enter State Sex Offender & Child Predator Registry Log information and create letters.

Social Impact: Failure of the SOCPR section to timely respond to Court mandated requests related to the registration of convicted sex offenders could result in the State losing the statutory authority to require sex offenders to register thus negatively impacting the criminal justice system's ability to protect and serve constituents.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2004	14	2012	STAT DED = 100%	$100K-$500K

Application: Troop/Unit Ticket Accountability: Score = 3.5

Description: Databases (14) that tracks the tickets assigned to each of the troopers in DPS Police.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2004	14	2015	STAT DED = 100%	$100K-$500K

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DWF

Application: Shrimp Excise Tax: Score = 3.5

Description: Internal facing application that is used to calculate and collect tax on shrimp harvest within State territorial waters. Louisiana collects an excise tax on all saltwater shrimp harvested from State waters as well as all shrimp imported into the State. * 15 cents per barrel of 210 pounds of head-on, unpeeled shrimp * 15 cents per barrel of 125 pounds of headless, unpeeled shrimp * 15 cents per barrel of 75 pounds of headless, peeled shrimp. Information is submitted on Scantron sheet and through this application is imported into SQL and the data validated.

Social Impact: Commercial shrimp fishermen would have to calculate the tax numbers for their harvest and manually submit to the Agency.

Economic Impact: In 2017 this system collected a total of $143,214.06 for 3083 transactions.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2004	14	2004	STAT DED = 100%	$49K-$100K

Application: LA Game Lottery: Score = 3.5

Description: Internal facing application that allows entry of lottery applicants for the chance to hunt or fish on various wildlife management areas. Information is entered (lottery manager or student) using information from mailed in application. Once all applicants have been entered and the application deadline is reached, the computer center runs the random selection program and notifies the lottery manager. The number of lotteries averages about 20 per year with 4670 applicants for the 2017 season. Each lottery can have one or multiple "selections" with preference points being assigned to applicants based on the previous 3 years not having been selected.

Social Impact: Lottery selections can still take place but the benefits of preference points from the previous 3 years would not be used causing issues of fairness.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2009	9	2013	STAT DED = 100%	$49K-$100K

Application: DWF Public Website: Score = 3.5

Description: This is the main website for the agency. It provides information to the public on the agency as well as access to regulations, rules, and links to other hunting/fishing activities. Without the public facing website, the public would not have the link to purchase hunting and fishing licenses.

Social Impact: Access to seasonal information about hunting/fishing/boating would be unavailable. Citizens wishing to purchase hunting and or fishing licenses would have to go to agency regional offices or stores that sell licenses.

Economic Impact: WLF could potentially lose $77,000 per week that this is not available. The website brings in roughly $4 million a year in revenue. In person sales at stores or WLF regional offices would be unaffected.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2009	9	2017	STAT DED = 100%	$100K-$500K

Application: Oyster Tag Sales: Score = 3.5

Description: Internal facing application that acts as an inventory system for oyster tags. This system acts as the inventory and sales tracking system for all Oyster Tag Sales statewide. DWF sells roughly 3.4 million oyster tags per year. Each sack requires 1 tag. The price varies depending on the number of tags purchased. $0.45 under 100 tags; $0.25 100-999 tags; $0.15 1000+ tags, personalized tags are sold at a minimum of 6000+ for $0.15 plus a setup fee.

Social Impact: Commercial oyster fishermen would still be able to purchase the oyster tags from the Agency. Staff could still sell tags but would need to record information on paper to be compiled for tracking later.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2005	13	2008	STAT DED = 100%	$49K-$100K

Application: Designated Alligator Collection: Score = 3.5

Description: Internal application that is used by Rockefeller office to produce permits for the collection of alligator eggs. This application issues roughly 400 Alligator Egg Permits to individuals who gather Alligator Eggs in the marsh. Permits sell for $25 each.

Social Impact: Permits could still be produced manually for and therefore a potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: This application keeps up with the roughly $10,000 it collects per year.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2010	8	2010	STAT DED = 100%	$49K-$100K

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LDH

Application: OBH-OMH FTP-PPMR (Patient Population Movement Report): Score = 5

Description: Scheduled task application which serves to move uploaded PIP data files from the FTP server to a destination server and handles execution of separate executable to generate the PPMR. This application will be replaced when PIP is replaced.

Social Impact: Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: ELMHS and Central would not be able to reconcile quarterly reports, Uncompensated Care Cost (UCC)/Cost report information and provide monthly projections.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1993	25	2016	SGF = 100%	$0-$49K

Application: OS-ARCS (Accounts Receivable Control System): Score = 5

Description: Tracks ineligible patient fee balances owed to LDH facilities.

Social Impact: Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Placements are not scheduled but are sent to ODR as received from LDH agencies. Currently have 4,000 delinquent debts that total $900,000.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1988	30	1988	SGF = 100%	$100K-$500K

Application: OS-ARPCS (Accounts Receivable and Payable Control System): Score = 5

Description: Tracks accounts receivables and payables primarily for the Medicaid program.

Social Impact: Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: If the system were to go down the LDH Fiscal Department would not be able to balances. Average A/R balance is $152 Million and average A/P balance is $109 Million.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1988	30	1988	SGF = 100%	$100K-$500K

Application: OS-MERS (Medical Escrow Refund System): Score = 5

Description: Tracks Medicaid provider repayments, and interfaces with the Medicaid Management Information System (MMIS) to credit funds back to provider accounts. The system also interfaces with ISIS to remove funds from the Medicaid escrow account. When providers are overpaid, money is recouped by reconciling claims with Molina.

Social Impact: Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: If the system were to go down the LDH Fiscal Department would not be able to credit providers. The average amount credited to providers monthly is $1.2 Million.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1988	30	1988	SGF = 100%	$100K-$500K

Application: OS-SPS (Standard Payment System): Score = 5

Description: This system is used to make payments for small specialized programs not processed through Molina because they are not claim based. There are currently 4 or 5 programs using this service. Agencies have their own systems and currently send files to OMF. OMF prints the checks for the Agency and then sends a file with payment data back to the Agency and a file with journal entries to ISIS.

Social Impact: Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: If this system were to go down, the Fiscal Department would not be able to process checks for the programs at LDH. Programs are: (1) EHR, 62 average checks per month, average check $2,760.092.23 (2) MEC, 62 average checks per month, average check $113.687.11 (3) OSS, 5 average checks per month, average check $37,319.35 (4) CABHI, 4 average EFTs per month, average amount $11,368.44 (5) SUP, 4 average EFTs per month, average amount $11,780.22

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
1988	30	1988	SGF = 100%	$49K-$100K

Application: OBH-Daily Census: Score = 3.5

Description: Tracks the number of beds, number of clients currently in treatment and number on waiting list in OBH/AD 24 hr. facilities

Social Impact: If this system were to go down, the availability for beds at residential treatment facilities would be unknown. As of 1/1/2018, there are a total number of 6,885 bed days utilized (number of beds at each facility x number of days reported) out of the potential 17,112 OBH-AD funded bed days. Within these general bed day counts are multiple facilities, and patient population has to be balanced since some facilities operate at 0% utilization while others operate over 100% utilization. Knowing the availability of daily bed counts is key to balancing treatment for patients.

Economic Impact: Having this site is a Federal reporting requirement for HHS-SAMHSA (Substance Abuse and Mental Health Services Administration). If the State did not have this Daily Census site, OBH could lose up to $25M in funding as part of the HHS block grant to the State.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2002	16	2017	SGF = 100%	$100K-$500K

Application: OBH-PIP-Incident Tracking: Score = 3.5

Description: Accesses same patient database, adding data regarding client incidents as the PIP application as it is a component of PIP.

Social Impact: Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2000	18	2000	SGF = 100%	$100K-$500K

Application: OBH-TANF (Temporary Assistance to Needy Families): Score = 3.5

Description: This application is for temporary assistance to needy families (TANF). The providers use the system to input data for rollup reports and for submitting invoices for monthly payments from OBH. Generally speaking, without the system LDH could not report to the funding source (DCFS) and could not provide documentation for reimbursement. This will interfere with OBH's ability to be reimbursed from the funding source (DCFS). The money has already been IAT (Inter Agency Transferred) to the LGE (Local Government Entity) so the system does not interfere with their reimbursement.

Social Impact: The TANF providers will not be able to report out on performance indicators outlined in their respective contracts as they currently assist around 94 families.

Economic Impact: If this system were to go down, OBH could not report out to their funding source (DCFS) and could not provide documentation for reimbursement for submitting invoices of monthly payments from OBH that total approximately $215,000 to $235,000 per month.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2006	SGF = 100%	$49K-$100K

Application: OPH-PHAME Wrhs: Score = 3.5

Description: Public Health Automated Management Enabler (PHAME) warehouse.

Social Impact: This is a component of PHAME. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2010	Federal = 100%	$100K-$500K

LWC

Application: LWC Public Website (LAWorks.net): Score = 3.5

Description: LaWorks.net serves as the main website and portal for LWC. The website hosts the links to all services provided by LWC including Unemployment, Workforce Development Programs, Workers Compensation, Labor Market Statistics and more such as agency web pages, images, procurements, job announcements, Marquee Maintenance System, releases and other public information. It has been described as "outdated" and "inefficient" by the public.

Social Impact: Citizens in and out of Louisiana and employers rely on the self-service features of the website to locate services, apply for unemployment benefits, seek employment and training services, report wages, etc. and all of these related actions would be severely hampered should the website not be available.

Economic Impact: Should LAWorks.net not be available the economic impact could be devastating to those who rely on wages from unemployment payments annually of $194M, or those seeking employment services.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2001	17	2011	Federal = 90% SGF = 10%	$49K-$100K

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OJJ

Application: Central Registry: Score = 3.5

Description: This is the agency's investigative services database. It contains and tracks all investigations (both staff and youth). OJJ uses this database to track OJJ employee's violations and action taken against employee as well as tracks letters written to Judge on reported employee violation regarding a youth.

Social Impact: Without this database, OJJ would need additional staff at each location in order to track manually, which would pose a risk to youth and staff safety. Potential degradation of services to constituents from undetermined potential efficiencies lost exist.

Economic Impact: Without this database, OJJ would need additional staff at each location (likely 2-3 at each of the 3 sites, at a cost of approximately $65k per staff) in order to manually track where OJJ stands relative to investigations, which would have a financial impact on the agency. Potential undeterminable economic impact due to efficiencies lost exist.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2002	16	2012	SGF = 100%	$49K-$100K

Application: FBI/SSA/ESCAPE: Score = 3.5

Description: Tracking system and database for escaped youth used by OJJ Administration to track dates of notifications of escaped youth.

Social Impact: This is an internal facing application. Potential degradation of services to constituents from undetermined potential efficiencies lost.

Economic Impact: Potential undeterminable economic impact due to efficiencies lost.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2011	SGF = 100%	$49K-$100K

Application: Furlough: Score = 3.5

Description: This system provides a method to track the number of furloughed youth. This is very important both within the agency and has a direct impact on Public Safety.

Social Impact: If this system was not functional, the agency would not have a way of tracking youth who have been allowed to have a weekend / holiday pass (furlough) from OJJ Secure Care Facilities. It allows OJJ to know / track the day the youth went on furlough and the date due back to the facility, as approved by the court. It is critical for the agency to be aware of the whereabouts of the State's most violent youth for the safety of the general public.

Economic Impact: If this system were to fail, it would require staff to work additional hours. Potential undeterminable economic impact due to efficiencies lost exist.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2006	12	2010	SGF = 100%	$49K-$100K

Application: OJJ Facility Key Tracking: Score = 3.5

Description: Secure Facility Key Tracking application. This is a mandatory standard as required by the American Correctional Association and provides for an electronic manner, in which OJJ can rely upon, to know exactly what Secure Care Facility Keys are being utilized, who they been assigned to and to know when they should be / have been returned.

Social Impact: Information tracked within the Key Control Database. This is information is related to the agency's Secure Care Facilities and is a matter of Public Safety.

Economic Impact: If this system were to fail, it would require staff to work additional hours. Potential undeterminable economic impact due to efficiencies lost exist.

Year of Install	Age (Years)	Last Update	Funding Mechanism	Estimated Replacement Costs
2009	9	2009	SGF = 100%	$49K-$100K

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APPENDIXES

APPENDIX 1: OTS INDUSTRY STANDARD PROCESS IMPROVEMENTS

As noted in the Executive Summary, OTS has been active in modernizing process based actions following industry accepted best practices under the Project Management Institute (PMI) and IT Infrastructure Library (ITIL) including implementing Project Management Office standards, Enterprise Governance such as influence groups for data asset governance and information systems, Agile software methodology, and operational standards around Incident and Problem Management.

- Project Management Institute (PMI)
    - Agile Software Delivery
        - Agile was introduced in 2017 as an additional methodology for delivering software and giving the State a modern approach to software delivery from the historical and linear model of waterfall
        - Designed for delivering working software quickly and reducing the time to fail, Agile enables the State to get better solutions that meet the needs of the client agency quicker and allows for changes to happen without lengthy delays
        - An application rewrite at DPS – Office of Motor Vehicles is currently underway using Agile methodologies including Scrum.
- IT Infrastructure Library (ITIL)
    - Incident Management and Problem Management
        - The End User Computing (EUC) group within OTS introduced a formal Incident Management and Problem Management processes in early 2017 to provide the department with a systematic and repeatable process for handling critical and major incidents and the follow up process for identifying root cause(s) and contributing factors
        - The systematic processes allowed for an immediate response and communications format that permitted accurate and timely communication between OTS and the agencies consuming services through OTS
- Agile Continuous Delivery Methodology
    - Kanban Boards
        - The implementation of Kanban Boards, an Agile method for managing production of items, was introduced in EUC to provide transparency and improve delivery of field operations
        - Once proven successful, the EUC senior leadership team then introduced Kanban boards into their management strategy

APPENDIX 2: HIGHER EDUCATION – SOUTHERN UNIVERSITY SYSTEM

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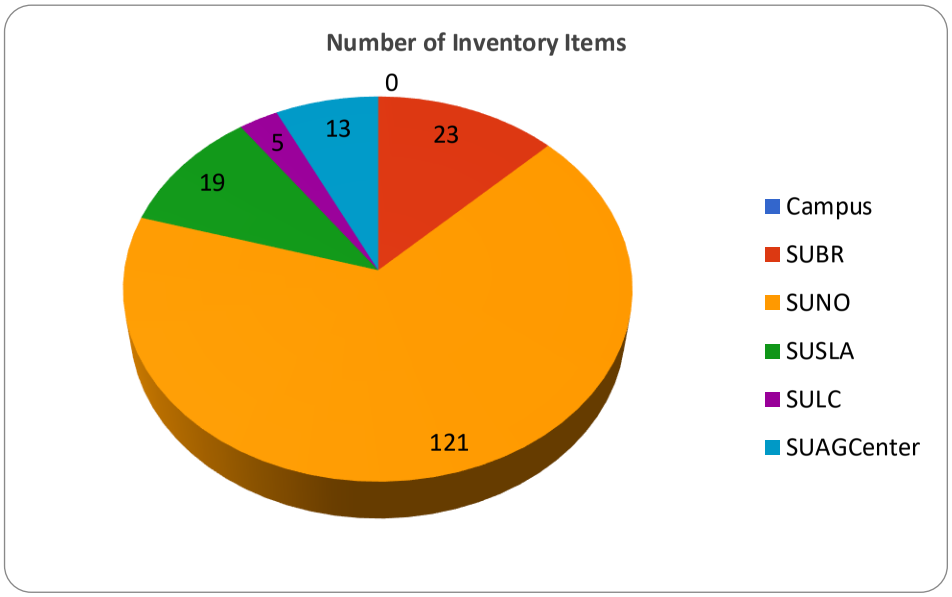
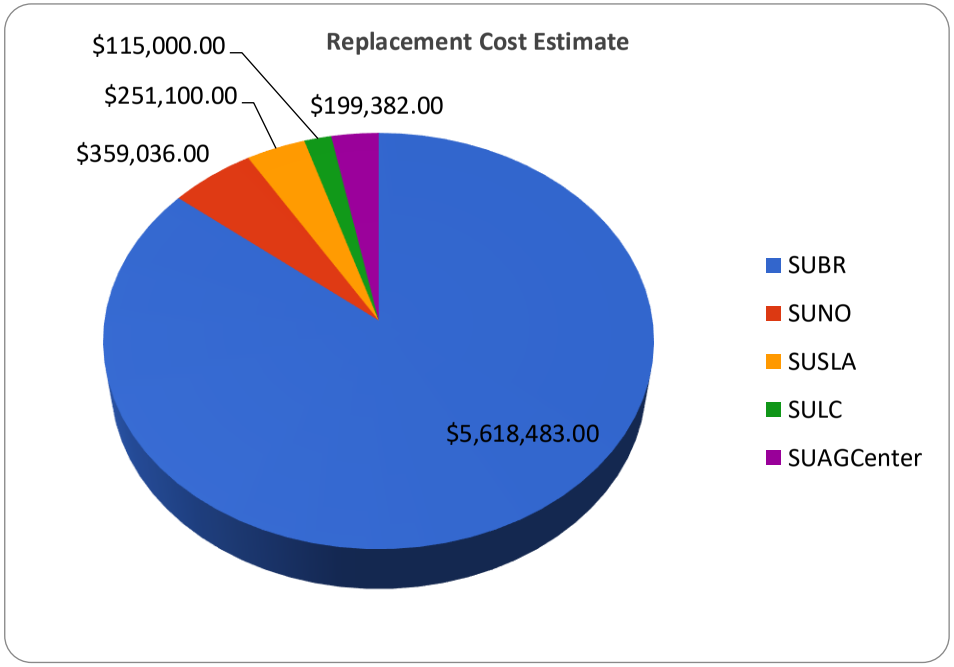
Campus	Number of Inventory Items	Replacement Cost
SUBR	23	$ 5,618,483.00
SUNO	121	$ 359,036.00
SUSLA	19	$ 251,100.00
SULC	5	$ 115,000.00
SUAGCenter	13	$ 199,382.00
All HCR 121 Infrastructure Inventory	**181**	**$6,543,001.00**





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APPENDIX 3: HIGHER EDUCATION – SOUTHEASTERN LOUISIANA UNIVERSITY

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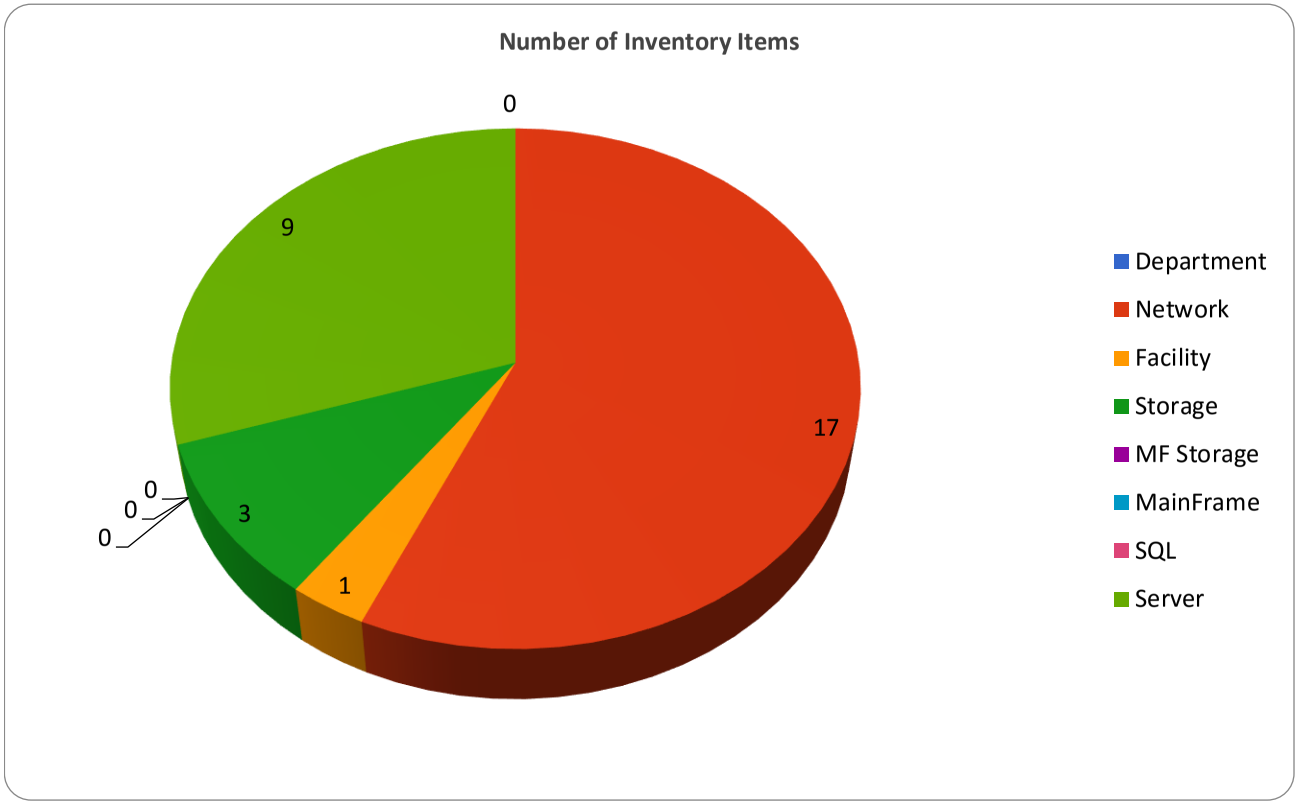
Application	Description	Importance	Year of install or modernization	Technology Rating	Functional Rating	Support Rating	Exposure
Active Directory	Directory	Very Essential	2014	Acceptable	Acceptable	Acceptable	Private
Vmware ESX	Virtual Machine Hypervisor	Very Essential	2004	Acceptable	Acceptable	Acceptable	Private
ADIO	Account Self-Service Portal	Somewhat Essential	2015	Acceptable	Acceptable	Acceptable	Public (Internet)
BackupPC	Local Backup Engine	Very Essential	2014	Acceptable	Acceptable	Acceptable	Private
Rocket.Chat	Internal Communication System	Somewhat Essential	2015	Acceptable	Acceptable	Acceptable	Public (Internet)
Gmail	Electronic Mail Service	Very Essential	2009	Acceptable	Acceptable	Acceptable	Public (Internet)
Moodle	Learning Platform	Very Essential	2009	Acceptable	Acceptable	Acceptable	Public (Internet)
ImageNow	Image Document System	Very Essential	2008	EOL	Acceptable	Acceptable	Private
PeopleSoft	Student Admin	Very Essential	2009	Acceptable	Acceptable	Acceptable	Public (Internet)
PeopleSoft	Financials	Very Essential	2008	EOL	EOL	EOL	Public (Internet)
PeopleSoft	HR/Payroll/T&L	Very Essential	2014	Acceptable	Acceptable	Acceptable	Public (Internet)

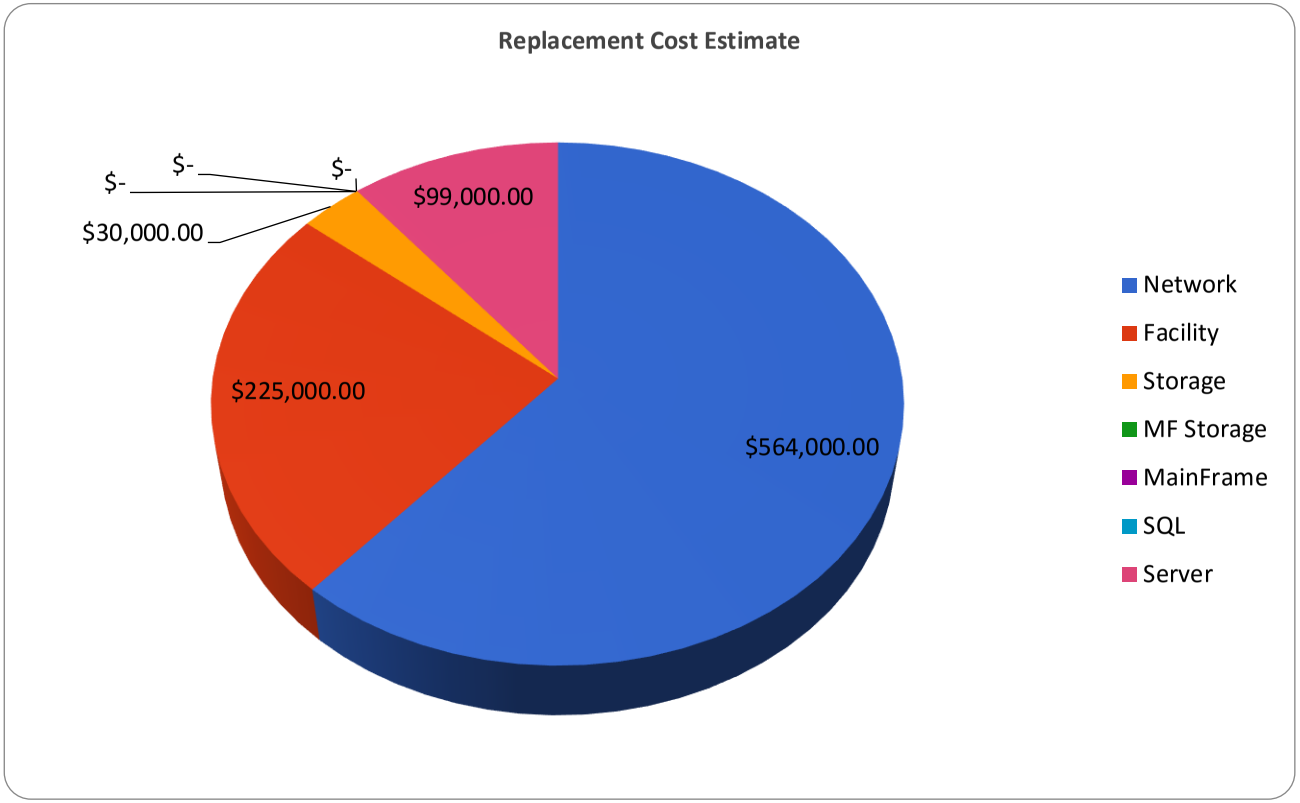
Restricted Data	AppDM Factors (Column E,F,G)	Negative Weight - Importance (Column C)	Positive Weight - Age (Column D)	Security Sub	Application Rating	Security Rating	**Risk**	Social / Economic Impacts
FERPA, PII	0	0	0	1	0	1	0.5	
Other	0	0	1	1	1	1	1	
PII	0	-1	0	2	0	2	1	
Other	0	0	0	1	0	1	0.5	
N/A (none)	0	-1	0	1	0	1	0.5	
PII	0	0	0	2	0	2	1	
FERPA, PII	0	0	0	2	0	2	1	
HIPAA, FERPA, PII	1	0	0	2	1	2	1.5	
HIPAA, FERPA, PII	0	0	0	2	0	2	1	
N/A (none)	3	0	0	3	3	3	3	
HIPAA, FTI. PII	0	0	0	2	0	2	1	

Recommendations	Cost	Dedicated Source of funding	Agency Priority
N/A			
will be out of support at the end of 2019; will be replaced by Workday but this is a 2-3 year project			
has been out of support for several years; will be replaced by Workday in the next 18 months			
will be replaced by Workday in the next 18 months			

Department	Number of Inventory Items	Replacement Cost
Network	17	$ 564,000.00
Facility	1	$ 225,000.00
Storage	3	$ 30,000.00
MF Storage	0	$ -
MainFrame	0	$ -
SQL	0	$ -
Server	9	$ 99,000.00

All HCR 121 Infrastructure Inventory	**30**	**$918,000.00**




Replacement Cost Estimate
$-
$-
$-
$30,000.00
$99,000.00
$225,000.00
$564,000.00
Network
Facility
Storage
MF Storage
MainFrame
SQL
Server

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APPENDIX 4: HIGHER EDUCATION – MCNEESE STATE UNIVERSITY

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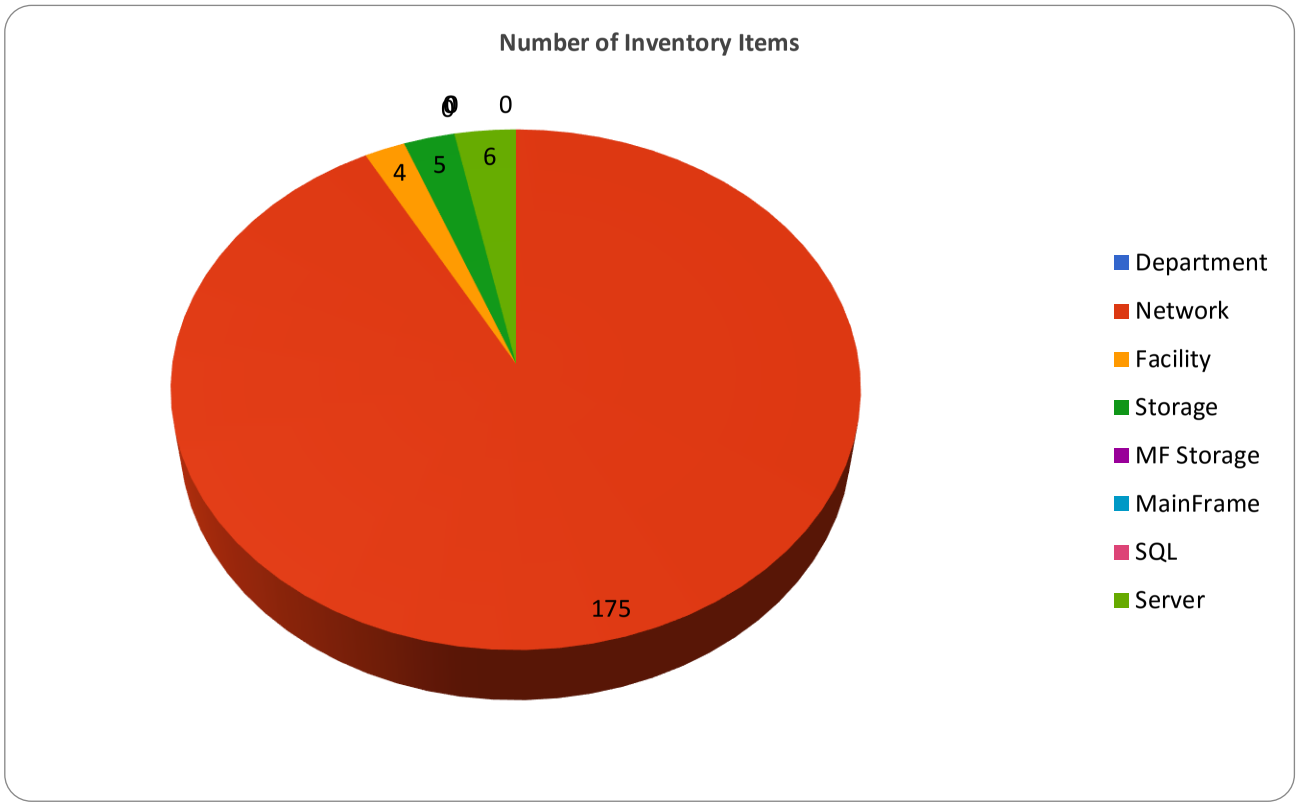
Application	Description	Importance	Year of install or modernization	Technology Rating	Functional Rating	Support Rating	Exposure
Banner SSB	ERP Self Service	Very Essential	2013	Acceptable	Acceptable	Acceptable	Public (Internet)
Banner INB	ERP Admin Interface	Very Essential	2017	Acceptable	Acceptable	Acceptable	Private
Oracle db	ERP database	Very Essential	2017	Acceptable	Acceptable	Acceptable	Private
DegreeWorks	Degree audit	Very Essential	2015	Acceptable	Acceptable	Acceptable	Public (Internet)
BDM	Doc Imaging	Very Essential	2015	Acceptable	Acceptable	Acceptable	Private
Automic	Job Scheduler	Very Essential	2015	Acceptable	Acceptable	Acceptable	Private
Argos	Report writer	Very Essential	2017	Acceptable	Acceptable	Acceptable	Private
Jira	Work order system	omewhat Essenti	2012	Acceptable	Acceptable	Acceptable	Private
Zimbra	Email system	Very Essential	2017	Acceptable	Acceptable	Acceptable	Public (Internet)
Portal	Self service	omewhat Essenti	2012	Acceptable	Acceptable	Acceptable	Public (Internet)

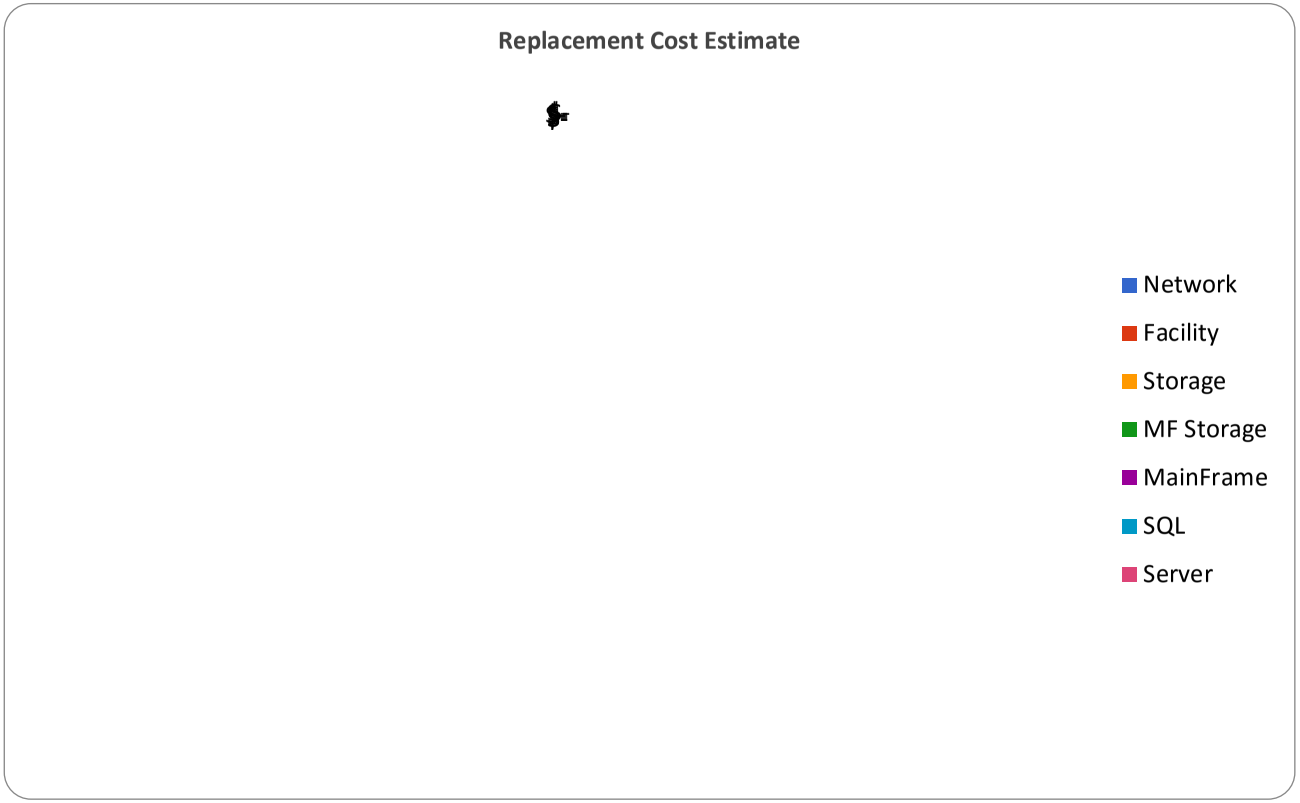
Restricted Data	AppDM Factors (Column E,F,G)	Negative Weight - Importance (Column C)	Positive Weight - Age (Column D)	Security Sub	Application Rating	Security Rating	**Risk**
N/A (none)	0	0	0	1	0	1	0.5
FERPA	0	0	0	1	0	1	0.5
PII	0	0	0	1	0	1	0.5
N/A (none)	0	0	0	1	0	1	0.5
FERPA	0	0	0	1	0	1	0.5
N/A (none)	0	0	0	0	0	0	0
N/A (none)	0	0	0	0	0	0	0
FERPA	0	-1	0	1	0	1	0.5
FERPA	0	0	0	2	0	2	1
N/A (none)	0	-1	0	1	0	1	0.5

Social / Economic Impacts	Recommendations	Cost	Dedicated Source of funding	Agency Priority

Department	Number of Inventory Items	Replacement Cost
Network	175	$ -
Facility	4	$ -
Storage	5	$ -
MF Storage	0	$ -
MainFrame	0	$ -
SQL	0	$ -
Server	6	$ -

All HCR 121 Infrastructure Inventory	**190**	**$0.00**




Replacement Cost Estimate
Network
Facility
Storage
MF Storage
MainFrame
SQL
Server

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APPENDIX 5: HIGHER EDUCATION – NICHOLLS STATE UNIVERSITY

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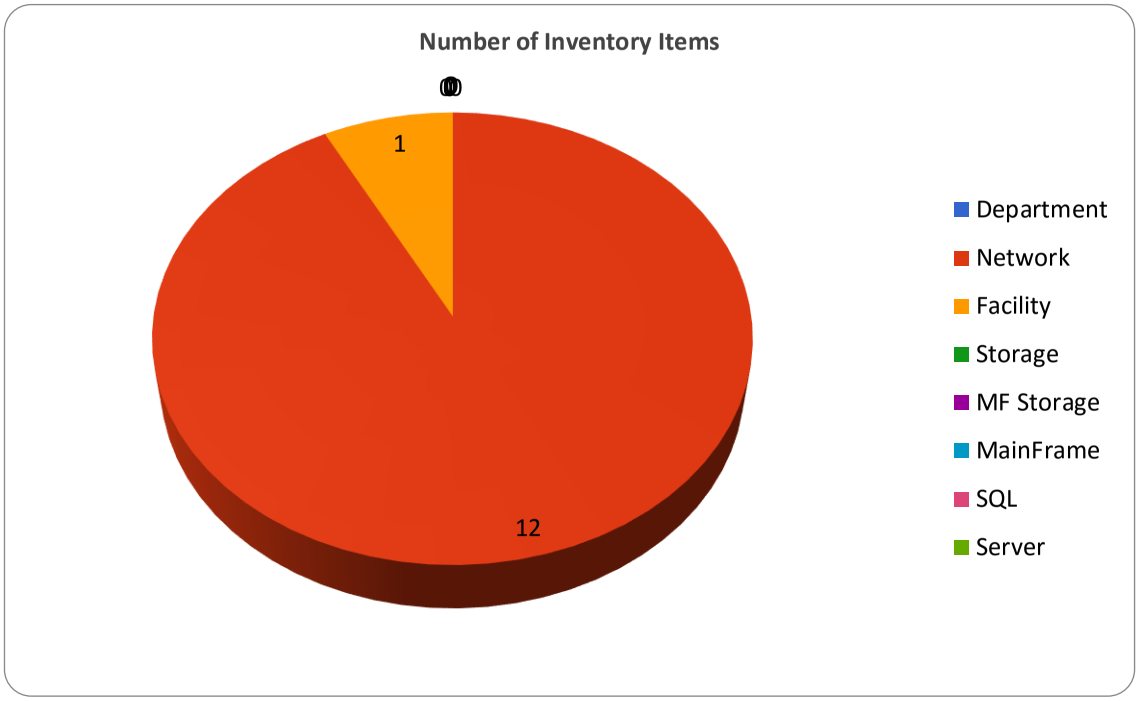
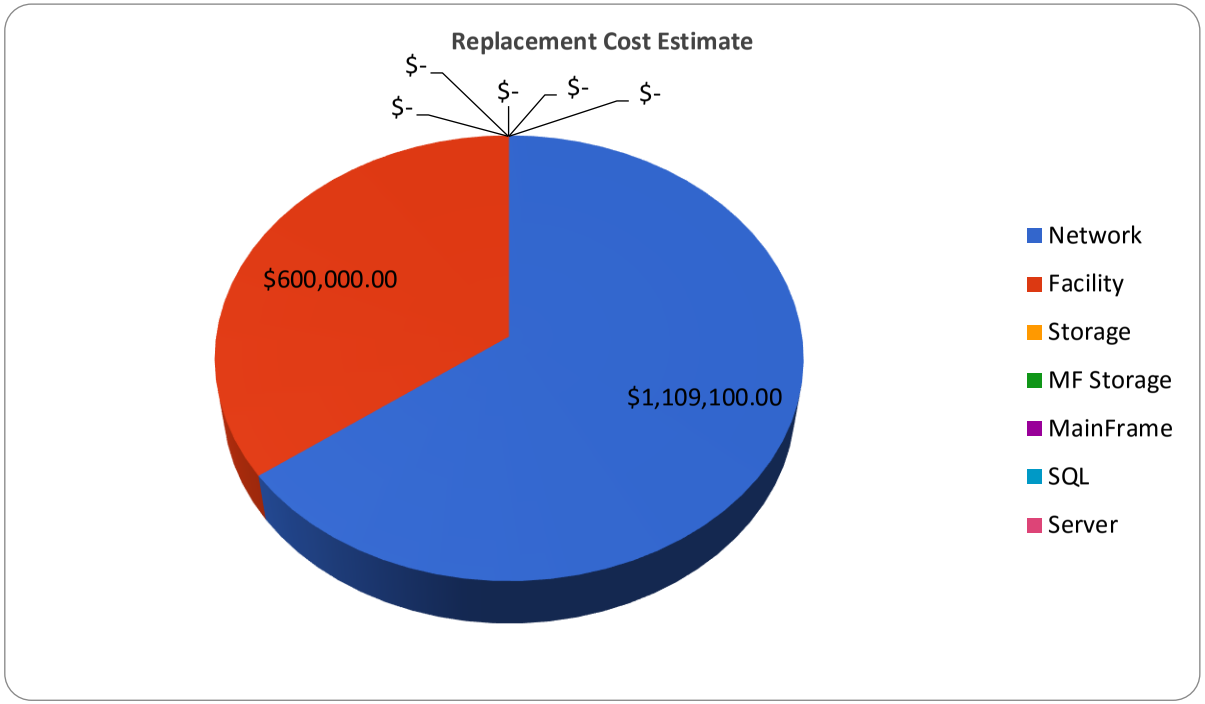
Application	Description	Importance	Year of install or modernization	Technology Rating	Functional Rating	Support Rating	Exposure
Banner	Campus ERP	Very Essential	2012	EOL	Acceptable	EOL	Public (Internet)

Restricted Data	AppDM Factors (Column E,F,G)	Negative Weight - Importance (Column C)	Positive Weight - Age (Column D)	Security Sub	Application Rating	Security Rating	Risk	Social / Economic Impacts
PII	2	0	0	4	2	4	3	

Recommendations	Cost	Dedicated Source of funding	Agency Priority
Upgrade is in planning stage	$250,000 - $350,000	Self Generated	1

Department	Number of Inventory Items	Replacement Cost
Network	12	$ 1,109,100.00
Facility	1	$ 600,000.00
Storage	0	$ -
MF Storage	0	$ -
MainFrame	0	$ -
SQL	0	$ -
Server	0	$ -
All HCR 121 Infrastructure Inventory	**13**	**$1,709,100.00**




Replacement Cost Estimate
$-
$-
$-
$-
$-
$600,000.00
$1,109,100.00
Network
Facility
Storage
MF Storage
MainFrame
SQL
Server

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APPENDIX 6: HIGHER EDUCATION – LOUISIANA TECHNICAL UNIVERSITY

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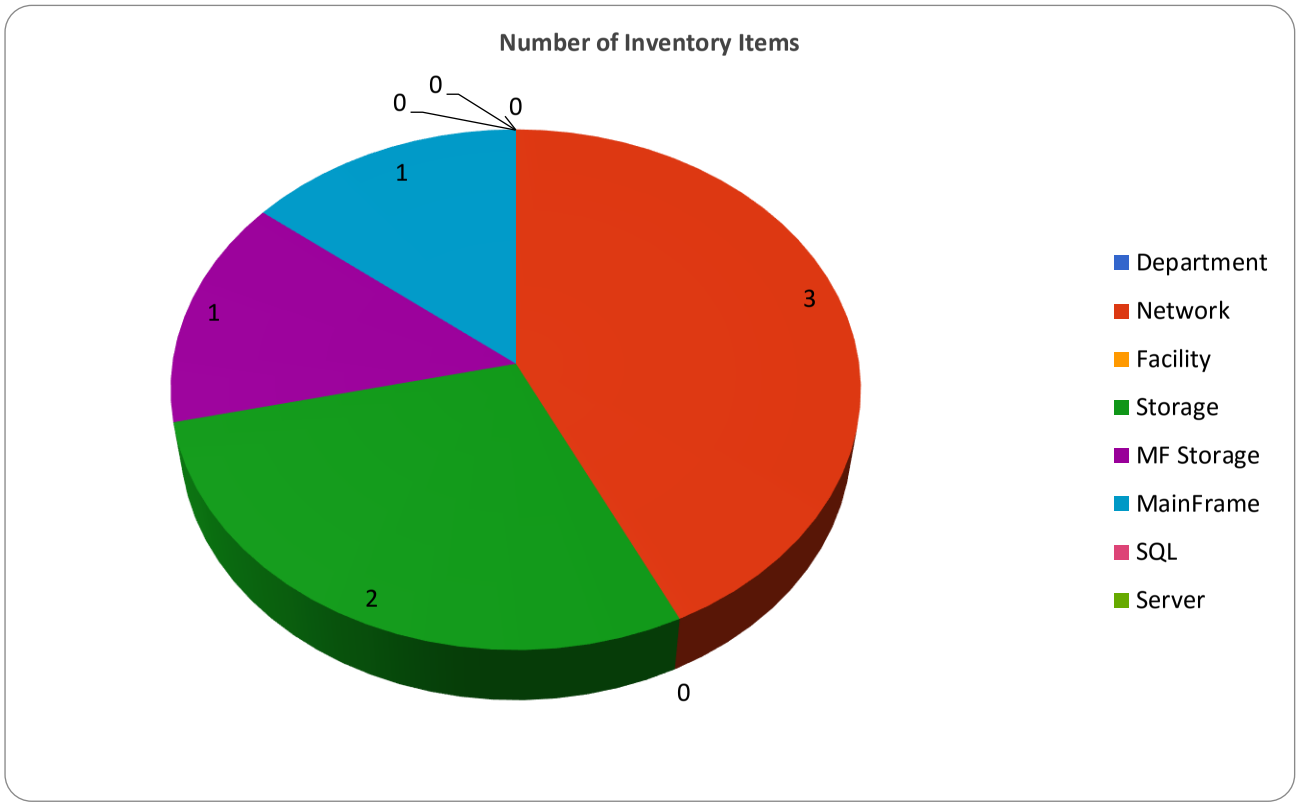
Application	Description
latech.edu	Website
Financials	Financial related Applications
Infrastructure	Infrastructure related Applications
Student	Student Information System related Applications

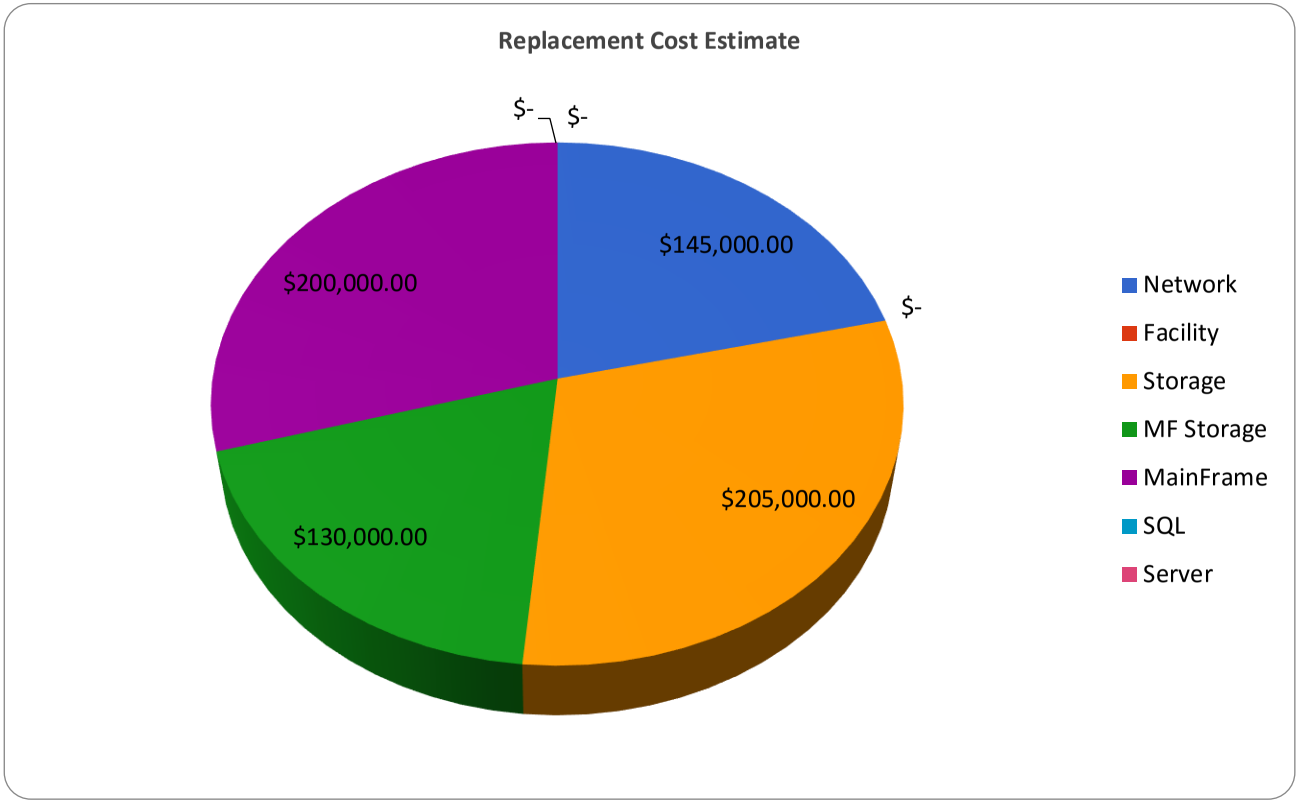
Note 1: Failure to implement these applications could result in loss of enrollment, student revenue, and economic impact to the surrounding economy.
Note 2: Once the new ERP is live and tested, the annual subscription costs will average approximately $600,000 per year. The elimination of the mainframe and supporting applications (see current costs above) will result in savings of at least $600,000 annually.

Importance	Year of install or modernization	Technology Rating	Functional Rating	Support Rating	Exposure	Restricted Data	InfoSec Rating Override	AppDM Factors (Column E,F,G)	Negative Weight - Importance (Column C)	Positive Weight - Age (Column D)
Very Essential	1994	Acceptable	EOL	Acceptable	Public (Internet)	N/A (none)		1	0	2
Very Essential	Varies	Acceptable	Acceptable	Acceptable	Private	PII		0	0	0
Very Essential	Varies	Acceptable	Acceptable	Acceptable	Private	PII		0	0	0
Very Essential	Varies	Acceptable	Acceptable	Acceptable	Private	FERPA		0	0	0

Security Sub	Application Rating	Security Rating	Risk	Social / Economic Impacts	Recommendations	Cost	Dedicated Source of funding	Agency Priority
1	3	1	2	See Note 1 below.	Currently being currently rebuilt			
1	0	1	0.5	See Note 1 below.	Most will be replace with new ERP. See Note 2 below.	$99,000		
1	0	1	0.5	See Note 1 below.	Most will be replace with new ERP. See Note 2 below.	$410,000		
1	0	1	0.5	See Note 1 below.	Most will be replace with new ERP. See Note 2 below.	$229,116		

Department	Number of Inventory Items	Replacement Cost
Network	3	$ 145,000.00
Facility	0	$ -
Storage	2	$ 205,000.00
MF Storage	1	$ 130,000.00
MainFrame	1	$ 200,000.00
SQL	0	$ -
Server	0	$ -
All HCR 121 Infrastructure Inventory	**7**	**$680,000.00**




Replacement Cost Estimate
$-
$-
$145,000.00
$-
$200,000.00
$205,000.00
$130,000.00
Network
Facility
Storage
MF Storage
MainFrame
SQL
Server

Louisiana Tech University
Response to HCR 121
Supplemental Information

Please find attached spreadsheets with Louisiana Tech University's response to House Concurrent Resolution (HCR) 121. The highest priority at Louisiana Tech University is to replace the current administrative information systems for finance, human capital management, payroll, and students. The core information systems at the University are self-maintained, have no vendor support, and their functionality does not meet the needs and expectations of the campus community.

The University has entered into a contract with Workday to replace these systems with a fully-cloud-based Enterprise Resource Planning (ERP) system. In the past, upgrading these legacy systems has been cost and effort prohibitive, but three factors have come together to prompt the University to move forward with an upgrade at this time:

- The existing information systems do not provide functionality that the University requires moving forward and the risk of maintaining the existing systems has reached an unacceptable point.
- The University has found a vendor partner in Workday that provides a solution which meets the current and future needs of the University.
- The University has partnered with two other universities in the ULS system and has recently finalized a joint contract with Workday. This collaborative contract, facilitated by the administration of the ULS system, allows each university to share in the right solution with enhanced and efficient ERP systems for all campuses, and does so with a significant cost reduction.

The spreadsheets submitted HCR 121 request for information indicate a legacy mainframe environment. As indicated above, Louisiana Tech is replacing that environment with a modern hosted solution which will best fit the needs of the University moving forward. The spreadsheets submitted include a collection of information system solutions with loose integration. The University plans to make use of the broad Workday functionality to minimize the cost of maintaining separate software solutions and to provide a more integrated information system.

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APPENDIX 7: HIGHER EDUCATION – GRAMBLING STATE UNIVERSITY

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Application	Description	Importance	Year of install or modernization	Technology Rating	Functional Rating	Support Rating
Ellucian Banner - Administrati	ERP	Very Essential	2013	EOL	EOL	Acceptable
Ellucian Banner - Self-Service	ERP	Very Essential	2013	EOL	EOL	Acceptable
Office 365	Email, Applications	Very Essential	2017	Acceptable	Acceptable	Acceptable
Data Protector	Backup	Very Essential	2008	EOL	EOL	Acceptable
OU Campus	Web management	Very Essential	2016	Acceptable	Acceptable	Acceptable
Canvas LMS	Learning management	Very Essential	2016	Acceptable	Acceptable	Acceptable
Blackboard Transact	One card system	Very Essential	2014	Acceptable	Acceptable	Acceptable
People Admin	HR performance/applicant tracking	Very Essential	2017	Acceptable	Acceptable	Acceptable

Exposure	Restricted Data	AppDM Factors (Column E,F,G)	Negative Weight - Importance (Column C)	Positive Weight - Age (Column D)	Security Sub	Application Rating	Security Rating
Private	PII	2	0	0	2	2	2
Public (Internet)	PII	2	0	0	3	2	3
Public (Internet)	Other	0	0	0	2	0	2
Private	PII	2	0	0	2	2	2
Public (Internet)	N/A (none)	0	0	0	1	0	1
Public (Internet)	FERPA	0	0	0	2	0	2
Public (Internet)	PCI	0	0	0	2	0	2
Public (Internet)	Other	0	0	0	2	0	2

Risk	Social / Economic Impacts	Recommendations	Cost	Dedicated Source of funding	Agency Priority
2		Transition to cloud services			1
2.5		Transition to cloud services			2
1					4
2		Transition to new solution (in progress)			3
0.5					7
1					6
1		Transition to cloud services			5
1					8

Internal ID	Tag #	Device Name	Description	End of Life
	1	Undergroung cable plan	Underground copper for telecommunication systems	2017
	2		Teleco generator	
	3		Halon system - data center	
	4		Halon systen - vaulat	
	5		PDU - Power distribution unit	

End of Support	Replacement Cost	Impact of Failure	Likelihood of Failure	Core Function	Dedicated source of revenue	Replacement Priority
		High	High			1
	80000	Med	Low			2
	150000	High	Low			4
	40000	High	Low			5
		Med	Med			3

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APPENDIX 8: HIGHER EDUCATION – UNIVERSITY OF NEW ORLEANS

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4. Identification of technology fees and other sources of revenue that are dedicated to technology needs.

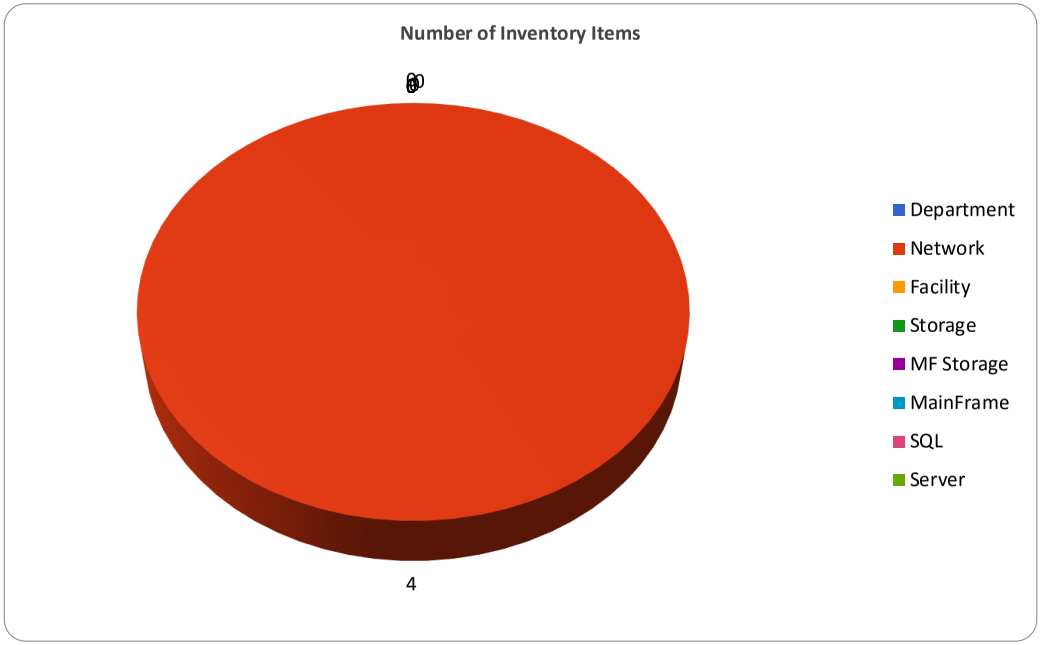
FY 2017-18 Student Technology Initiative Projected Revenue (as of 1/4/18)	$ 878,161.00
FY 2017-18 Student Technology Support Go Print Projected Revenue	$ 15,000.00
FY 2017-18 Indirect Cost Revenue	$ 13,230.00
	$ 906,391.00

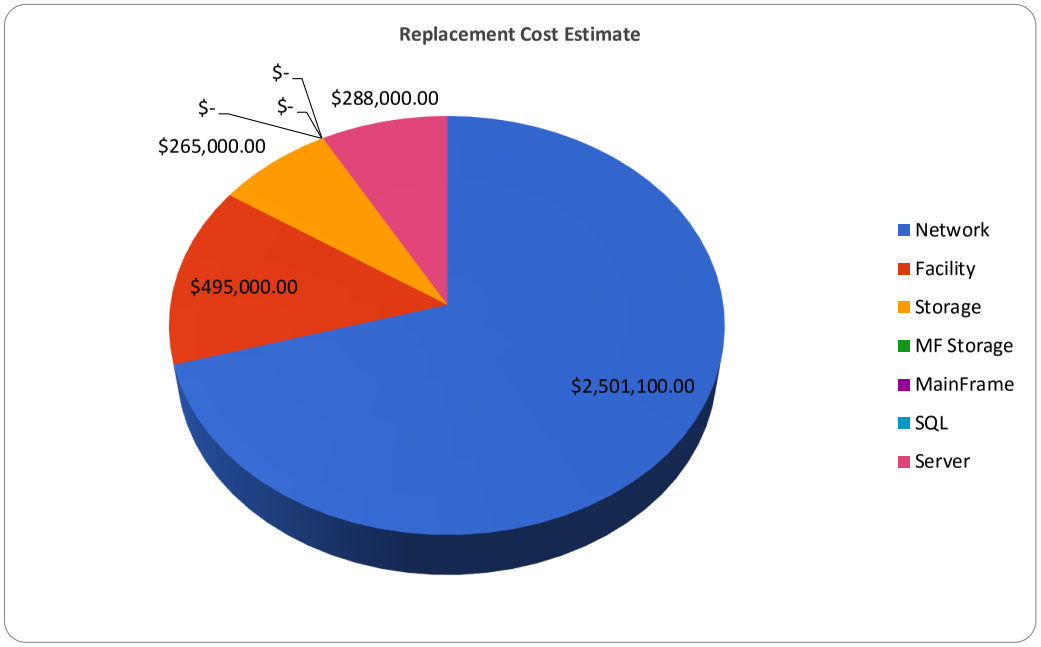
Application	Description	Importance	Year of install or modernization	Technology Rating
Active Directory	Campus Directory Services	Very Essential	2000	Acceptable
Ad Astra	Class scheduling and Space Utilization	Very Essential	2006	EOL
Apply Yourself	Student recruiting and communication module	Very Essential	2014	Acceptable
Budget	home grown budget system in Access	Very Essential	2001	EOL
Campus Police	home grown parking decal and incident reportin	Very Essential	2013	Acceptable
CAMS	home grown account provisioning system	Very Essential	2015	EOL
C-Cure	ID badge, card access system	Very Essential	2012	Acceptable
Cybersource	credit card payment processor	Very Essential	2008	Acceptable
Data 180	Faculty Credentials and Workload tracker	Somewhat Essential	2015	Acceptable
e2campus	Campus alerts	Very Essential	2017	Acceptable
EAB APS	Faculty Workload system	Somewhat Essential	2015	Acceptable
EAB Guide	mobile guide for students	Very Essential	2015	Acceptable
EAB SSC	Student Success system	Very Essential	2015	Acceptable
Exchange	Email	Very Essential	2016	Acceptable
GoPrint	Print Queue manager	Somewhat Essential	2012	Acceptable
HEAT	Help Desk software	Very Essential	2012	EOL
iAgree	home grown certification for	Somewhat Essential	2015	Acceptable
KMS (Key Management System)	Manages software licenses	Very Essential	2016	Acceptable
Live Text	Learning module for Education students	Very Essential	2013	Acceptable
Milestone	Video surveillance	Very Essential	2012	Acceptable
MIM (Microsoft Identity Manager)	Identity management and provisioning	Very Essential	2016	Acceptable
Moodle	Learning Management System	Very Essential	2011	Acceptable
Office 365	Cloud email	Very Essential	2017	Acceptable
OnBase	Image storage and indexing system	Very Essential	2017	Acceptable
Oracle 11.2		Very Essential	2011	EOL
PeopleSoft Financials	Financials module	Very Essential	2009	EOL
PeopleSoft HR	Human resources module	Very Essential	2015	Acceptable
PeopleSoft Student	Student module	Very Essential	2011	Acceptable
Remote Desktop Server	allow remote access to machines on campus	Very Essential	2012	Acceptable
SCCM (System Center Configuration Manager)	Desktop Software management	Very Essential	2016	Acceptable
Sharepoint	Internal form routing	Very Essential	2010	Acceptable
Skype for Business	Phones, messenging	Very Essential	2015	Acceptable
VISIX	Electronic signage	Somewhat Essential	2017	Acceptable
WEAVE	Institutional Effectiveness	Somewhat Essential	2017	Acceptable

Functional Rating	Support Rating	Exposure	Restricted Data	AppDM Factors (Column E,F,G)	Negative Weight - Importance (Column C)	Positive Weight - Age (Column D)	Security Sub	Application Rating
Acceptable	Acceptable	Public (Internet)	HIPAA	0	0	1	2	1
EOL	EOL	Public (Internet)	N/A (none)	3	0	1	3	4
Acceptable	Acceptable	Public (Internet)	HIPAA	0	0	0	2	0
EOL	EOL	Private	N/A (none)	3	0	1	2	4
Acceptable	Acceptable	Public (Internet)	HIPAA	0	0	0	2	0
EOL	EOL	Public (Internet)	HIPAA	3	0	0	4	3
Acceptable	Acceptable	Public (Internet)	HIPAA	0	0	0	2	0
Acceptable	EOL	Public (Internet)	HIPAA	1	0	0	3	1
Acceptable	Acceptable	Public (Internet)	HIPAA	0	-1	0	2	0
Acceptable	Acceptable	Public (Internet)	N/A (none)	0			1	
Acceptable	Acceptable	Public (Internet)	HIPAA	0	-1	0	2	0
Acceptable	Acceptable	Public (Internet)	HIPAA	0	0	0	2	0
Acceptable	Acceptable	Public (Internet)	HIPAA	0	0	0	2	0
Acceptable	Acceptable	Public (Internet)	N/A (none)	0				
Acceptable	Acceptable	Public (Internet)	N/A (none)	0	-1	0	1	0
EOL	EOL	Private	N/A (none)	3	0	0	2	3
Acceptable	Acceptable	Public (Internet)	HIPAA	0	-1	0	2	0
Acceptable	Acceptable	Private	N/A (none)	0	0	0	0	0
Acceptable	Acceptable	Public (Internet)	HIPAA	0	0	0	2	0
Acceptable	Acceptable	Private	HIPAA	0	0	0	1	0
Acceptable	Acceptable	Public (Internet)	HIPAA	0	0	0	2	0
Acceptable	Acceptable	Public (Internet)	HIPAA	0	0	0	2	0
Acceptable	Acceptable	Public (Internet)	N/A (none)	0				
Acceptable	Acceptable	Public (Internet)	HIPAA	0	0	0	2	0
Acceptable	EOL	Private	HIPAA	2	0	0	3	2
Acceptable	EOL	Public (Internet)	N/A (none)	2	0	0	3	2
Acceptable	Acceptable	Public (Internet)	N/A (none)	0	0	0	1	0
Acceptable	Acceptable	Public (Internet)	HIPAA	0	0	0	2	0
Acceptable	Acceptable	Public (Internet)		0	0	0	1	0
Acceptable	Acceptable	Public (Internet)		0	0	0	1	0
Acceptable	Acceptable	Public (Internet)	HIPAA	0	0	0	2	0
Acceptable	Acceptable	Private	N/A (none)	0				
Acceptable	Acceptable	Private	N/A (none)	0				
Acceptable	Acceptable	Public (Internet)	N/A (none)	0	-1	0	1	0

Security Rating	Risk	Social / Economic Impacts	Recommendations	Cost	Dedicated Source of funding	Agency Priority
2	1.5		migrating to Azure Active Directory			
3	3.5		moving to cloud based service			
2	1					
2	3		try to replicate function in Workday			
2	1					
4	3.5					
2	1					
3	2					
2	1		try to replicate function in Workday			
2	1					
2	1					
2	1					
1	0.5					
2	2.5		replacing with SysAid			
2	1		try to replicate function in Workday			
0	0					
2	1					
1	0.5					
2	1					
2	1					
2	1					
3	2.5		update to 12C, moving to Workday			
3	2.5		moving to Workday			HIGH
1	0.5		moving to Workday			HIGH
2	1					
1	0.5					
1	0.5					
2	1		try to replicate function in Workday			
1	0.5					

Department	Number of Inventory Items	Replacement Cost
Network	4	$ 2,501,100.00
Facility	0	$ 495,000.00
Storage	0	$ 265,000.00
MF Storage	0	$ -
MainFrame	0	$ -
SQL	0	$ -
Server	0	$ 288,000.00
All HCR 121 Infrastructure Inventory	**4**	**$3,549,100.00**





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APPENDIX 9: HIGHER EDUCATION – UNIVERSITY OF LOUISIANA MONROE

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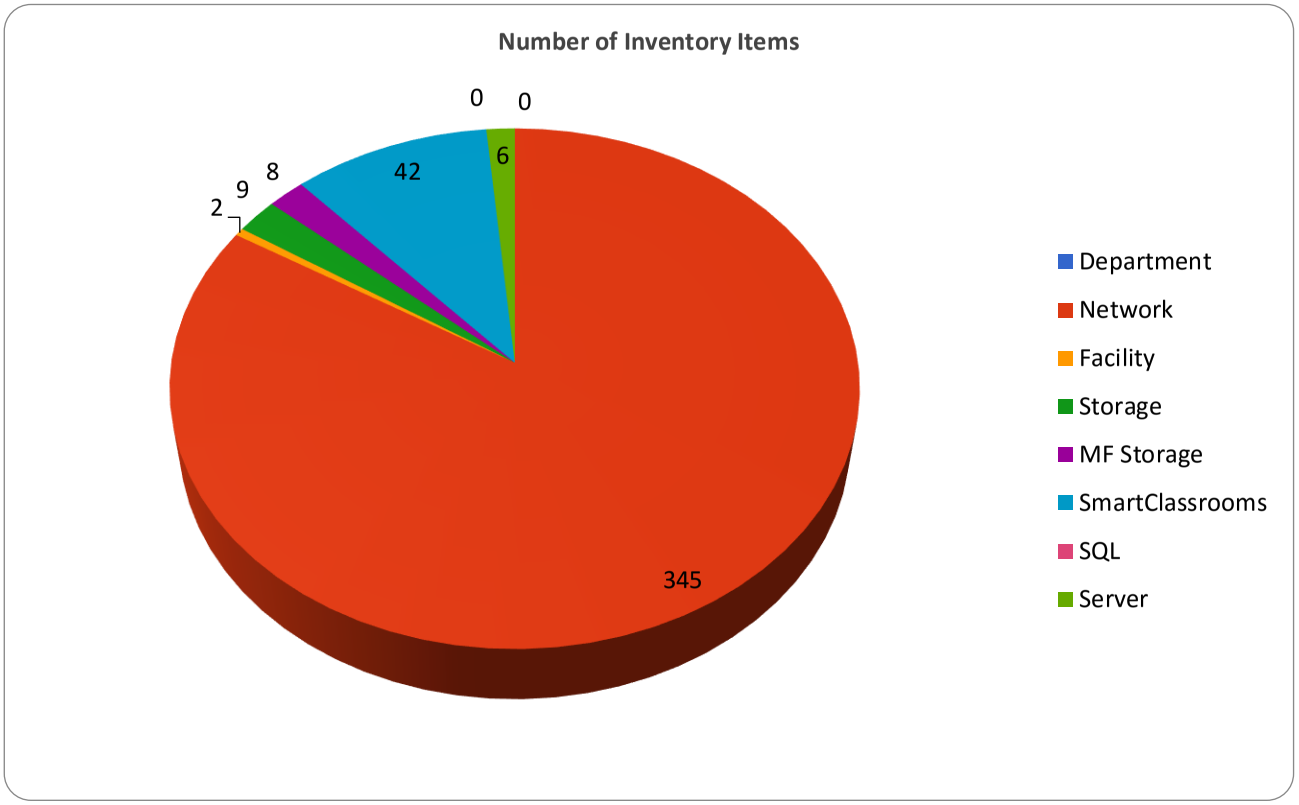
Application	Description	Importance	Year of install or modernization	Technology Rating	Functional Rating	Support Rating	Exposure
	Identity Management Platform	Very Essential		Unknown	Unknown	Unknown	Public (Internet)
Barracuda	Email Gateway	Very Essential	2005	Acceptable	Acceptable	Acceptable	Private

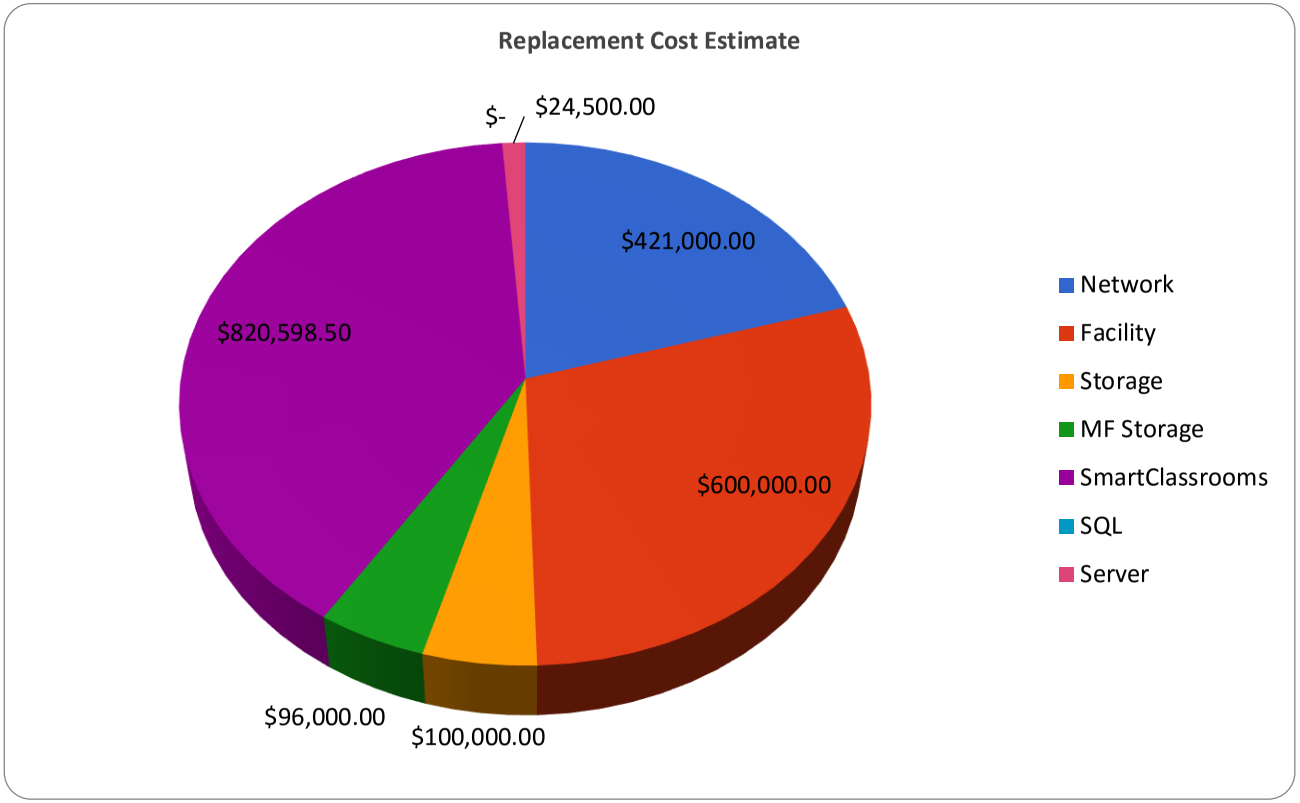
Restricted Data	AppDM Factors (Column E,F,G)	Negative Weight - Importance (Column C)	Positive Weight - Age (Column D)	Security Sub	Application Rating	Security Rating	**Risk**
PII	0	0	0	2	0	2	1
N/A (none)	0	0	1	0	1	0	0.5
	3	0	0	2	3	2	2.5
	3	0	0	2	3	2	2.5
	3	0	0	2	3	2	2.5
	3	0	0	2	3	2	2.5
	3	0	0	2	3	2	2.5
	3	0	0	2	3	2	2.5
	3	0	0	2	3	2	2.5

Social / Economic Impacts	Recommendations	Cost	Dedicated Source of funding	Agency Priority
	Needed to improve user management and life cycle of accounts	300000		
	Needed to improve filtering of adverse email content - phishing, etc	120000		

Department	Number of Inventory Items	Replacement Cost
Network	345	$ 421,000.00
Facility	2	$ 600,000.00
Storage	9	$ 100,000.00
MF Storage	8	$ 96,000.00
SmartClassrooms	42	$ 820,598.50
SQL	0	$ -
Server	6	$ 24,500.00

All HCR 121 Infrastructure Inventory	**412**	**$2,062,098.50**




Replacement Cost Estimate
$-
$24,500.00
$421,000.00
$820,598.50
$600,000.00
$96,000.00
$100,000.00
Network
Facility
Storage
MF Storage
SmartClassrooms
SQL
Server

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APPENDIX 10: HIGHER EDUCATION – UNIVERSITY OF LOUISIANA LAFAYETTE

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HCR 121 Analysis

University of Louisiana at Lafayette

Agency=94000

Priority/Type	Value (Cost Basis)	Items	Average of AGE
1			
FACILITY	36,875	5	16.57
NETWORK	64,610	11	6.97
SERVER	228,626	34	7.77
STORAGE	809,432	32	9.07
2			
FACILITY	11,000	4	8.20
NETWORK	68,080	8	9.10
SERVER	81,205	18	10.81
STORAGE	40,709	5	9.30
3			
NETWORK	10,688	5	10.11
SERVER	395,582	20	12.95
STORAGE	8,500	1	14.75
4			
NETWORK	47,814	13	17.09
SERVER	50,086	6	16.31
STORAGE	267,182	4	12.47
5			
NETWORK	8,148	4	17.68
SERVER	25,720	8	13.73
Grand Total	**2,154,257**	**178**	**10.87**

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APPENDIX 11: HIGHER EDUCATION – LOUISIANA STATE UNIVERSITY SYSTEM

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Preface:

- HCR 121 was issued Spring 2017. LSU first heard of the requirement on December 21, 2017 with a deadline of December 31, 2017. Although we can provide a high level response to meet this deadline, providing the more granular level response required by the Excel spreadsheets will take a longer time to collect. We expect to have that available by June 30, 2018.
- The State Agencies and Higher Education CIOs are members of the Council of Information Services Directors (CISD) that meets monthly. Two of LSU system CIOs have been officers this past year. Fred Piazza, President and David Alexander, VP. LSU A&M is an active participant. There is a State OIT report at every CISD meeting and the reporting requirements of HCR 121 were never discussed in those meetings.
- The LSU campuses central technology offices work in sync by maintaining a strong bond through the CIO Alliance. We meet regularly and maintain an active online discussion keeping each other aware of what is going on at each campus. In addition, for enterprise IT solutions including major enterprise applications and security, the group serves as principals in the Enterprise Architecture team developed to ensure LSU not only modernizes the IT infrastructure but also that we build the new IT ecosystem to support an efficient federated and shared services model for enterprise IT at LSU.
- LSU A&M has a decentralized IT support when it comes to non-enterprise IT solutions. Each college and/or department has their own localized IT support. All of them rely on the central IT services and solutions, but all have additional localized needs specific to their unique missions. These localized IT resources report to their academic and or departmental leaders.

Due to the extensive nature of the requirements as outlined in the email from the State CIO and attached Excel spreadsheet content, LSU System will be providing both an interim, high-level response to meet the immediate deadline and a more detailed response later this year.

- The interim response provides a description of what LSU has done, and is doing, to address its aging IT infrastructure. Our proposed answer is outlined in the short-term area below. In addition, through the CISD organization, LSU has asked that the CISD President invite the State CIO to our next meeting to more fully discuss the goal for their charge so we can all work together to provide the most valuable response back to legislators.
- The more detailed response that contains the granular level data points required by the State CIO request can be achieved for the LSU system by the end of the fiscal year. The LSU CIO Alliance will work together to compile the granular details from our current activities of the IT Governance, enterprise architecture modernization, student modernization project, security modernization, IT risk assessment, and the IT Funding Model re-design discussions.

Interim response:

Using the five specific requirements in the actual resolution, we have compiled the following interim response to the information request from OIT stemming from HCR 121.

For the past decade, LSU has been working on a plan to modernize its aging IT infrastructure. The current mainframe and its historical tailored applications have a very short remaining life left (2 years). However, those plans did not start getting traction until 2014 when there was a change in leadership and mainframe support retirement announcements started to become critical for LSU. At that time, LSU started moving the plans for IT modernization with the planning and implementation of the replacement of aging mainframe administrative applications (HR and Finance). A new ERP (Workday) was competitively selected as the LSU tool of choice. Those two modules were implemented in June 2016.

On March 2017, a new CTO joined LSU A&M and one of her priorities was to ensure an enterprise plan was devised and implemented to modernize the IT infrastructure for LSU. This plan had to include a full partnership with all of the CIOs of the LSU system. The LSU CIO Alliance was formally placed to make sure open communication exists within the central IT groups in the system.

As part of the development of the IT Roadmap, LSU conducted an assessment of current IT architecture, assessment of IT core competencies, inventory and assessment of IT projects, an IT Risk Assessment, and an assessment of the student system replacement needs. That modernization plan (aka IT Roadmap) was documented with full knowledge and input from the CIO Alliance, and then shared with the community at large including the LSU A&M Deans, and the Technology Support Providers (TSP) in each college and department again for input and awareness. Once the input was received, the new CTO put the gears in motion to institutionalize the plan. It is important to note that this plan is a 2.5 year long plan to fully modernize the IT infrastructure for LSU. We are currently 6 months into that plan but much has been accomplished thus far. Here are some highlights:

- Created the **LSU IT Governance Council** which became engaged in August 2017. Developed jointly by Rick Koubek, Executive Vice President and Provost and Dan Layzell, Executive Vice President for Finance and Administration/CFO in July 2017, the IT Governance Council will provide oversight for IT activities on campus to ensure alignment with objectives stated in our Strategic Plan. The group will use data-supported measurements — such as strategic fit, return on value (ROV), total cost of ownership (TCO) and strategic directions — in prioritizing and finding resources for the many conflicting requests for IT services. As such, members of the group will make recommendations for decisions based on overall University needs. This new Council is led by the Associate Vice Provost for Institutional Effectiveness and supported by the LSU A&M Chief Technology Officer, and is comprised of representatives from all facets of the University system. The IT Governance will be helping us charter our course for the future IT environment through its efforts to develop the policies, rules and standards needed for IT at the University. The demands upon our enterprise technologies continue to escalate, and will continue to do so at an even faster rate in the future. We expect the IT Governance Council to evaluate and prioritize the demands upon enterprise technologies, oversee data access, evaluate and monitor progress on Enterprise IT activities, and ensure that enterprise IT activities are aligned with the objectives of LSU's Strategic Plan.
- Formed the **Enterprise Architecture** team who is working on defining an enterprise architecture strategy that will include formalized architectural principles (includes on premises, shared service and cloud strategies) for LSU. The scope of this group includes planning for the replacement of all aging mainframe applications with modern and scalable enterprise solutions, optimizing and standardizing current end-to-end business processes to use industry best practices that are provided by our administration systems, reviewing current administrative system customizations and removing or streamlining any customizations that are unused or increase complexity for users, and looking for modern, efficient enterprise solutions that can be installed in this federated environment. In addition, this group is planning for building a shared-service institutional business intelligence environment to provide a common data access service that the entire university can use for learning, research, and administrative reporting and analytical needs and designing a flexible and cost-effective architecture for future data centers on our campuses.
- Formalized the **Portfolio Management Office** (PMO). The LSU PMO is responsible for providing a consistent, effective, and efficient management of the full ITS Project Portfolio providing the University Community with quality enterprise solutions in accordance with the University Strategic Goals. The PMO makes sure LSU IT project procedures, practices and operations go right — on time, on budget and all in the same way.
- Driven by internal Audit, LSU conducted the **IT Risk Assessment** for LSU. One of the greatest risks LSU has relates to the aging applications in the mainframe and the lack of human resources left that can keep that operation going. In the spring of 2017, LSU engaged a third party to conduct an IT Risk Assessment for the University to include all of the campuses. The resulting study produced a heat map and corresponding audit plans for addressing each of the risk areas identified in the study. In all, 18 areas were identified and ranked, and a risk rating assigned to each. The following risk areas were identified as having a risk rating ranging from "High" to "Moderate/High". The remaining 11 risk areas were classified as being "Moderate" to "Low".
    - Data Security: Encryption strategy and systems for data at rest and in motion. (Very High)

- Security Awareness & Training: Tools/activities to promote community awareness of policies, processes, and social engineering methods. (Very High)
- Security Continuous Monitoring: Replacement of Security Incident and Event Monitoring systems (SIEM) and infrastructure (High)
- Citizen IT / Rogue IT: Management of the threat posed by unsanctioned software, infrastructure, or Cloud services for University business. (High)
- IT Strategy: Enhanced IT governance processes and supporting technology (ex. Contract Management System). (High)
- Bring your own Device (BYOD): Systems to address the threats posed by Advanced Persistent Threats and malware introduced by personal devices. (Moderate/High)
- Protective Technology: The need to update firewall and anti-virus technologies. (Moderate/High)

- LSU A&M is in the midst of a project (**IT Security Modernization**) to upgrade and revamp security policies, processes, systems, and infrastructure associated with IT security. While this project is focused primarily on the model of the A&M campus, the strategies and solutions identified as part of the project will be chosen and implemented with an intent to serve or adapt them to all of the LSU campuses. Cyber security is a complex and frequently expensive area for any organization to address and maintain so typically the impact of all security related systems and infrastructure is considered to be high. The systems and areas under primary consideration within the scope of the project include Identity and Access Management, Encryption, Vulnerability Management, Phishing Awareness and Intelligence, Anti-virus and Endpoint Protection, Sensitive Data Scanning, and Security Incident and Event Management. A number of these areas were also identified as areas of concern by the other LSU campuses in the IT Risk Assessment conducted by the University in 2017.
- **Inventoried all of the remaining tailored academic and administrative applications currently in the aging mainframe**. This inventory is key because each one of these applications need to be reviewed for need in light on the IT Roadmap, assessed for a new enterprise solution, and then converted into these new solutions all within the remaining 2 years. We are currently in the assessment of need stage of this effort and it is expected to be fully complete by June 30, 2018. Once the assessment is done, the PMO will then package this for the IT Governance to make a decision on prioritization so the replacement of needed applications can commence.
- Just in December 2017, the CFO formed a committee to look at the **IT funding needs** to support all of these efforts. The goal is to develop and implement a progressive IT financial management business model that promotes transparency, accountability, and enhanced decision-making when it comes to IT resources. That committee will kick off in January and we expect to have some of the deliverables for the CFO to evaluate by spring 2018. This working group is tasked with the development of a comprehensive funding model for the University that is sustainable, affordable, and equitable for all LSU campuses and units.

Detailed response:

As part of our IT Roadmap goals, we expect to be in a position to provide the granular level response requested by the State CIO by June 30, 2018. It will be a comprehensive answer that includes the full spectrum for the LSU System.

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APPENDIX 12: HIGHER EDUCATION – NORTHWESTERN STATE UNIVERSITY

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Response to House Concurrent Resolution 121

The information included below is in response to an information request related to HCR121 from June 2017, prepared for the University of Louisiana System for submission to the Board of Regents and the Louisiana Office of Information Technology. Based upon conversations with system personnel and other university IT staff, this response includes a list of systems we believe would fit the criteria of being at-risk for failure and/or lacking efficiencies in their current state. Northwestern State recognizes the critical role of technology at the institution and despite declining state funding has worked diligently to support essential needs. As a result, we have maintained a robust infrastructure that provides an extensive array of services to our users. This has been achieved through a combination of state and self-generated funds including but not limited to those provided by student technology and electronic learning fees.

Questions regarding the information provided may be directed to Ron Wright –rwright@nsula.edu, Chief Information Officer for the university.

Application Systems:

System Name: Budget Development and Reporting System

Platform: HP Itanium / VMS / COBOL

Age: 25+ years

Description: This system is used for the annual budget analysis, development, and reporting processes.

Current Risks and Impact of Failure: Risks related to the ongoing maintenance and continued use of the existing system includes: 1) An aged, obsolete development platform; 2) Potential failure of the proprietary hardware and the associated replacement costs; 3) The inability to find employees with the necessary skills and experience to maintain software in that environment.

System failure would require substantial changes to the existing internal budgeting processes resulting in a loss of automation and increased demands on staff.

Estimated Cost to Replace: $75,000. This is the estimated cost for a complete in-house rewrite using modern development tools and a relational database computed by dedicating 1 FTE staff member for the period of one year to the project.

System Name: Facilities Room Utilization and Reporting

Platform: HP Itanium / VMS / COBOL

Age: 25+ years

Description: This system tracks building usage for the campus so that required state reporting can be maintained and provided as required.

Current Risks and Impact of Failure: Risks related to the ongoing maintenance and continued use of the existing include: 1) An aged, obsolete development platform; 2) Potential failure of the proprietary hardware and the associated replacement costs; 3) The inability to find employees with the necessary skills and experience to maintain software in that environment.

System failure would require substantial changes to the existing facilities tracking and reporting processes resulting in a loss of automation and increased demands on staff.

Estimated Cost to Replace: $40,000. This is the estimated cost for a complete in-house rewrite using modern development tools and a relational database computed by dedicating 1 FTE for the period of six months to the project.

Telecommunications / Networking

System Name: Campus Telephone System / PBX

Platform: Nortel CS1000

Age: 17 years

Description: The Nortel PBX provides telephone services for the campus.

Current Risks and Impact of Failure: Risks related to the ongoing maintenance and continued use of the existing system include: 1) Some components are no longer actively supported by the manufacturer and must be procured from third parties; 2) Aging hardware and software that do no support modern connectivity options.

A failure of the existing system would result in the inability to communicate with the public. Replacement of this system is a high priority and evaluation of available replacements is underway. The evaluation of possible replacements has been delayed due to the inability of the state to offer SIP trunking capabilities through the state contract. This is necessary to implement a modern VOIP based system.

Estimated Cost to Replace: $650,000. This is an estimated cost based upon an initial vendor proposal.

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APPENDIX 13: ELECTED OFFICALS – PUBLIC SERVICE COMMISSION

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Application	Description	Importance	Year of install or modernization	Technology Rating	Functional Rating	Support Rating	Exposure	Restricted Data	AppDM Factors (Column E,F,G)	Negative Weight - Importance (Column C)	Positive Weight - Age (Column D)	Security Sub
GIS Utilities programs	The systems used by the LPSC is a vital feature of the State's response to emergencies. The GIS mapping software used by the LPSC is designed to create a detailed mapping of utility outages, by parish (Outage application) . Also, the system produces a electric utility service area map (Distribution application) which depicts the electric distribution system of each of our jurisdictional companies using primary distribution lines.	Very Essential	2010	Acceptable	Acceptable	Reaching EOL	Internal	None	0	0	0	1
Case and Document Management System	The Case Management system accommodates all common types of tariffs as well as affidavits, appeals, complaints, motions, testimonies, and many other submissions. Featuring a web access interface in addition to a complete document imaging and management system.	Very Essential	2017/18	Acceptable	Acceptable	Acceptable	Public access to document repository	A placecard resides in the system in place of the confidential data including who to contact for more info	0	0	0	1
Consultant Billing and Case Management Program	Legal cases appearing before the LPSC in some cases require the hiring of outside consultants, the expense of hiring those consultants is incurred by the regulated entities involved in the case. To facilitate the management of consultants, the cases on which they are assigned, and the processing of the consultant invoices, the LPSC developed the Billing and Case Management System. This system was developed to the address the auditing requirements of the legislative auditors.	Very Essential	2017/18	Acceptable	Acceptable	Acceptable	Internal	None	0	0	0	1
Consumer Complaint Tracking System	and/or forward directly to the company in question, and track the completion time of the resolution. The system also retains the consumer's information and case history, which allows District Offices the ability to retrieve this data for any future and/or further purposes. The system also allows District Offices the ability to track complaints by Utility Company and Parish. By doing so, this gives District Offices the current and concise information on how a particular utility company	Very Essential	2017/18	Acceptable	Acceptable	Acceptable	Internal	None	0	0	0	1
Do Not Call Program	Data collection application for those who wish to enroll in the Do Not Call program located offsite at our Vendors data center.	Very Essential	2013	Acceptable	Acceptable	Acceptable	Internal	None	0	0	0	1
Help Desk	An Enhancement Request/Problem Notification tracking application. User request made of the Information Technologies division are logged into this application by the user, the requesting user has the ability to track progress of their request/problem online.	Essential	2017/18	Acceptable	Acceptable	Acceptable	Internal	None	0	#N/A	0	1

LPSC Public Website		Very Essential	2017/18	Acceptable	Acceptable	Acceptable	Public (Internet)	None	0	0	0	2
LPSCweb Portal	Implementation of the portal was to address issues with disseminating information to the commission staff and to create a launching point for the web based applications being developed for the Commission	Necessary	2017/18	Acceptable	Acceptable	Acceptable	Internal	None				
Transportation Division Carrier Application	The carrier application allows the Transportation division to manage all necessary information pertaining to LPSC registered carriers.	Very Essential	2017	Acceptable	Acceptable	Acceptable	Internal	None	0	0	0	1
Utilities Management Program	The application has the ability to provide detailed information to perform tasks such as track and manage utility and telecommunications carrier compliance with LPSC filing requirements and bond posting requirements	Essential	2017/18	Acceptable	Acceptable	Acceptable	Internal	None	0	#N/A	0	1

Application Rating	Security Rating	Risk	Social / Economic Impacts	Cost	Dedicated Source of funding	Agency Priority
0	1	0.5	The LPSC provides parish electric outage reports to GOHSEP for dissemination.	Reaching EOL - Potential replacement cost is $50,000 minimum.	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
0	1	0.5		$ -	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
0	1	0.5		Developed and supported in-house	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
0	1	0.5		Developed and supported in-house	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
0	1	0.5		$ -	Telephonic Solicitation Relief Fund Y04	1
#N/A	1	#N/A		Developed and supported in-house	Utility & Carrier Inspection & Supervision Fee Fund Y03	2

0	2	1		Developed and supported in-house	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
				Developed and supported in-house	Utility & Carrier Inspection & Supervision Fee Fund Y03	2
0	1	0.5		$ -	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
#N/A	1	#N/A		Developed and supported in-house	Utility & Carrier Inspection & Supervision Fee Fund Y03	1

Internal ID	Tag #	Device Name	Description	End of Life	End of Support	Replacement Cost	Impact of Failure	Likelihood of Failure	Core Function	Dedicated source of revenue	Replacement Priority
GM5BD42	2530	PowerEdge R630	Server	6/30/2020	6/30/2020	6000	Failover in place	24 hour response maintenance	VmWare host	Telephonic Solicitation Relief Fund Y04	1
GM5CD42	2531	PowerEdge R630	Server	6/30/2020	6/30/2020	6000	Failover in place	24 hour response maintenance	VmWare host	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
GNS5D42	2532	PowerEdge R730	Server	6/30/2020	6/30/2020	9500	Failover in place	24 hour response maintenance	Disk to disk archive	Utility & Carrier Inspection & Supervision Fee Fund Y03 & Telephonic Solicitation Relief Fund Y04	1
GNS6D42	2534	PowerEdge R730	Server	6/30/2020	6/30/2020	9500	Failover in place	24 hour response maintenance	Co-Lo Disk to disk archive	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
D4F5942	2533	EqualLogic 6100	SANS	6/30/2020	6/30/2020	22000	Failover in place	24 hour response maintenance	SANS	Utility & Carrier Inspection & Supervision Fee Fund Y03 & Telephonic Solicitation Relief Fund Y04	1
		N-2024	Switch	6/30/2020	6/30/2020	1800	Failover in place	24 hour response maintenance	Network (rack) switch	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
		N-2024	Switch	6/30/2020	6/30/2020	1800	Failover in place	24 hour response maintenance	Network (rack) switch	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
JMX1643X1B3		CISCO ASA 5510	ISB Router	9/30/2018	9/30/2018	1000	Disconnection of the following 7 sites		ISB router	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
JMX1643Z27A		CISCO ASA 5505	Shreveport Router	8/31/2022	8/31/2022	600	Office network disconnected	Under maintenance, 24 hr response	Satelight office router	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
JMX164417J		CISCO ASA 5505	Monroe Router	8/31/2022	8/31/2022	600	Office network disconnected	Under maintenance, 24 hr response	Satelight office router	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
JMX2118GO6Q		CISCO ASA 5505	Crowley Router	8/31/2022	8/31/2022	600	Office network disconnected	Under maintenance, 24 hr response	Satelight office router	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
JMX1643Z27D		CISCO ASA 5505	Lafayette Router	8/31/2022	8/31/2022	600	Office network disconnected	Under maintenance, 24 hr response	Satelight office router	Utility & Carrier Inspection & Supervision Fee Fund Y03	1

JMX1643Z27B		CISCO ASA 5505	Baton Rouge Router	8/31/2022	8/31/2022	600	Office network disconnected	Under maintenance, 24 hr response	Satelight office router	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
JMX16434009		CISCO ASA 5505	Mandeville Router	8/31/2022	8/31/2022	600	Office network disconnected	Under maintenance, 24 hr response	Satelight office router	Utility & Carrier Inspection & Supervision Fee Fund Y03	1
JMX1643Z279		CISCO ASA 5505	Metairie Router	8/31/2022	8/31/2022	600	Office network disconnected	Under maintenance, 24 hr response	Satelight office router	Utility & Carrier Inspection & Supervision Fee Fund Y03	1

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APPENDIX 14: ELECTED OFFICALS – DEPARTMENT OF STATE CIVIL SERVICE

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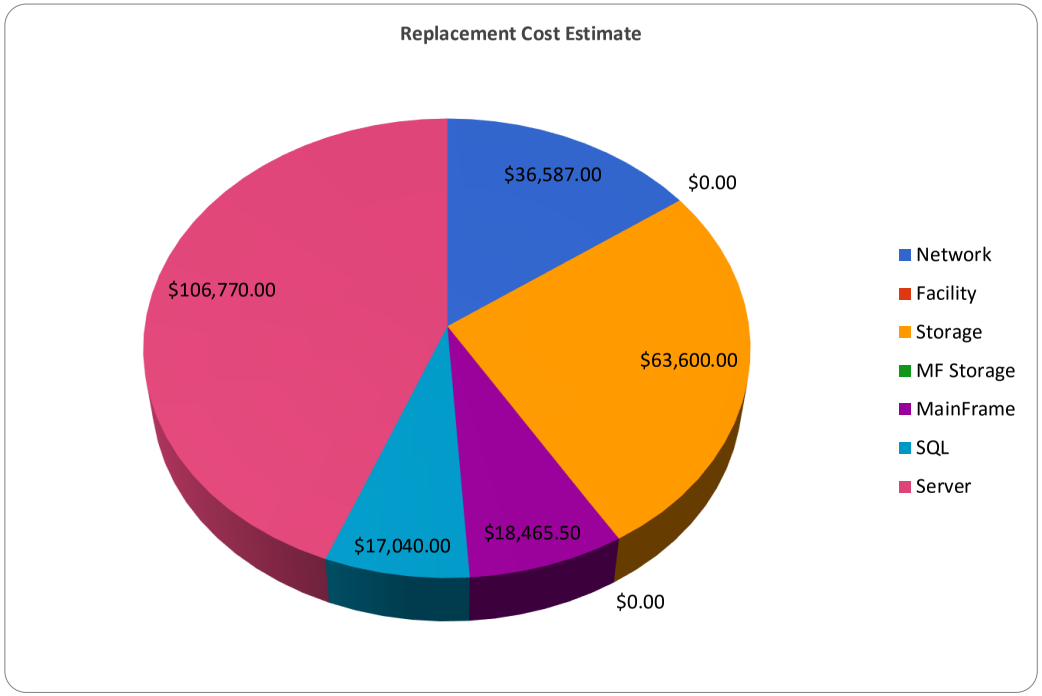
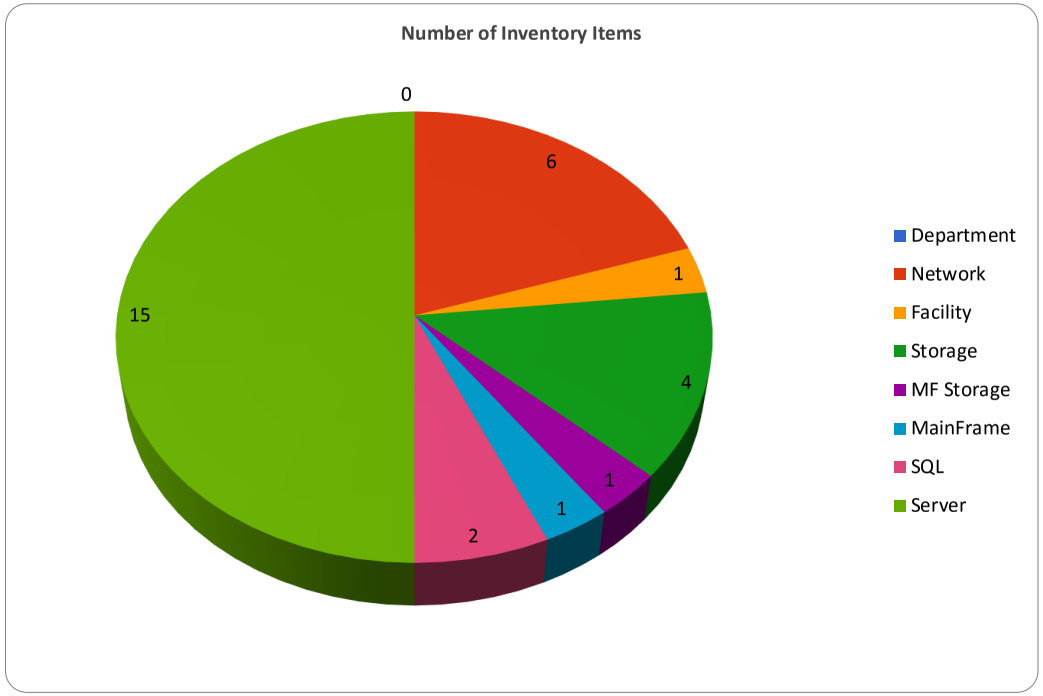
Application	Description	Importance	Year of install or modernization	Technology Rating	Functional Rating	Support Rating	Exposure
SharePoint	Intranet, internal/external workflows	Somewhat Essential	2015	Acceptable	Acceptable	Acceptable	Public (Internet)
Agency website	State HR Community news/resources /applications	Somewhat Essential	2017	Acceptable	Acceptable	Acceptable	Public (Internet)
Intranet Apps	Numerous internal business process applications (on AS400 through .Net)	Somewhat Essential	2016	Acceptable	Acceptable	Acceptable	Private
Data Collection/Statistical Reporting	Collection of statewide employment data and numerous business reports for state employment statistical information and internal productivity reports	Very Essential	2016	Acceptable	Acceptable	Acceptable	Private

Restricted Data	InfoSec Rating Override	AppDM Factors (Column E,F,G)	Negative Weight - Importance (Column C)	Positive Weight - Age (Column D)	Security Sub	Application Rating	Security Rating	Risk
N/A (none)	1 - Low Risk	0	-1	0	1	1 - Low Risk	1	1
N/A (none)	1 - Low Risk	0	0	0	1	1 - Low Risk	1	1
N/A (none)	1 - Low Risk	0	0	0	1	1 - Low Risk	1	1
N/A (none)	1 - Low Risk	0	0	0	1	1 - Low Risk	1	1

Social / Economic Impacts	Recommendations	Cost	Dedicated Source of funding	Agency Priority
Business functions would be hampered but not halted	Upgrade to SharePoint 2016	$11,296.56	N/A	3
Business functions would be severly hampered but not halted	Redesign is underway	$0.00	N/A	1
Business functions would be hampered but not halted	N/A	$0.00	N/A	7
Business functions would be severly hampered but not halted	N/A	$0.00	N/A	7

Department	Number of Inventory Items	Replacement Cost
Network	6	$36,587.00
Facility	1	$0.00
Storage	4	$63,600.00
MF Storage	1	$0.00
MainFrame	1	$18,465.50
SQL	2	$17,040.00
Server	15	$106,770.00
All HCR 121 Infrastructure Inventory	**30**	**$242,462.50**




Number of Inventory Items
0
6
1
15
4
1
1
2
Department
Network
Facility
Storage
MF Storage
MainFrame
SQL
Server

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APPENDIX 15: ELECTED OFFICALS – DEPARTMENT OF AGRICULTURE

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Application	Description	Importance	Year of install or modernization	Technology Rating
Pesticide Certification & Training	Pesticide Certification Tracking	Very Essential	2005	EOL
PEPSI (Pesticide Inspection / Enforcement)	Pesticide Inspection / Enforcement	Very Essential	2005	EOL
Brand Tracking	Registered Animal Brand and Payment Tracking	Very Essential	2005	EOL
Horticulture License & Permitting	Horticulture license & permit tracking	Very Essential	2008	EOL
Timekeeping	Internal timekeeping system	Very Essential	2003	EOL
AgChem Lab	Track samples sent to AgChem from PEPSI	Very Essential	2005	EOL
BWEP (Bollweevil Eradication)	Track bollweevil eradication program & spraying of fields	Somewhat Essential	2005	EOL
Marketing Coupons	WIC & Senior Citizen farmers market coupon tracking	Very Essential	2007	EOL
Animal Traceability	Animal Health and Movement Tracking	Very Essential	2006	EOL

Revenue	Track incoming money for various in-house programs & accounting processes	Very Essential	2001	EOL
Stumpage	Track taxes received from timber	Very Essential	2013	EOL
Document Imaging	Used for management of scanned documents	Very Essential	2007	EOL
Print Shop	Print report of licenses to be printed daily, prints the licenses	Somewhat Essential	2005	EOL
Reports Program	Miscellaneous reports for in-house users	Somewhat Essential	2003	EOL
Sweet Potato Weevil	Track sweet potato weevil traps across the state	Somewhat Essential	2005	EOL
Dairy Licensing	Regulatory Software for Dairy Industry	Somewhat Essential	2006	EOL
LDAF Intranet	Used for internal resource management and application portal.	Somewhat Essential	2004	EOL
Food Distribution	USDA Food Distribution Management Software	Very Essential	2012	Acceptable
LEMIS	Crime Records Management System	Somewhat Essential	2015	Acceptable
USAplants - Scales & Scanners	Regulatory Software for Weights & Measures Program	Very Essential	2017	Acceptable

HomeOffice - AHS	Track ag commodities for Animal Health	Somewhat Essential	2004	EOL
WinWam	Weights and Measures Inspection Software	Very Essential	2012	EOL
USAPlants - Seed	Regulatory Software for Seed Program	Very Essential	2017	Acceptable
USAPlants - Pesticide Registration	Regulatory Software for Pesticide Registration Program	Very Essential	2017	Acceptable
USAPlants - Fertilizer	Regulatory Software for Fertilizer Licensing	Very Essential	2017	Acceptable
ProProfs	Online Testing	Somewhat Essential	Perpetual (SAAS)	Acceptable
FPP (Forestry Productivity Program)	Track hardwoods/tree farmers	Very Essential	2016	Acceptable
Requisition	Purchasing Requests Management	Very Essential	2016	Acceptable
Deer Licenses	Track deer licenses	Somewhat Essential	2016	Acceptable

Farm Bill Reporting Time Entry	Used by district offices to enter time for USDA employees	Very Essential	2015	Acceptable
WinDSX	Software for card access to LDAF facilities.	Very Essential	2015	Acceptable
ZScaler	Proxy for internet traffic (Cloud Service)	Very Essential	Perpetual (SAAS)	Acceptable
USAPlants - Feed, Pet Food, Lime	Track registration & tonnage of pet food, feed & lime	Very Essential	2017	Acceptable
Absolute Service	IT Helpdesk Ticketing System	Very Essential	2015	Acceptable
Central Supply	Internal Supplies Inventory / Distribution Application & Window issues	Somewhat Essential	2015	Acceptable
Faster	Fleet Management	Very Essential	2014	Acceptable
Commodities	Track issue of grain, elevator & grader sampler licenses	Somewhat Essential	2017	Acceptable
Forestry Fire Weather and Statistics	District data entry for fires	Very Essential	2016	Acceptable
Forestry In-house Inventory Tracking	Track in-house inventory	Very Essential	2017	Acceptable
LAFA Purchasing	Enter & track purchase requests for LAFA	Very Essential	2015	Acceptable
AHS Requests	Maintains certificates and veterinary forms	Very Essential	2016	Acceptable
Pet Turtle Licenses	Track turtle farm licenses	Somewhat Essential	2016	Acceptable
Sugarcane Licenses	Maintain sugarcane licenses and print id cards	Somewhat Essential	2017	Acceptable
AgChem Labworks	Lab Testing Database	Very Essential	2011	Acceptable
Storage Craft	Backup Software	Very Essential	2015	Acceptable
LANrev (Absolute)	Software to inventory servers and computers	Very Essential	2013	Acceptable
HEAT Software (Livetime)	Ticket system software	Very Essential	2013	Acceptable

Fax Core	Network Faxing	Very Essential	2015	Acceptable
VMware	Software to create and manage virtual servers	Very Essential	2012	Acceptable
AD Self Service	Allow users to unlock account in AD	Somewhat Essential	2017	Acceptable

Functional Rating	Support Rating	Exposure	Restricted Data	InfoSec Rating Override	Risk	Social / Economic Impacts
EOL	EOL	Private	PII		3.5	This system manages approximately 3,000 pesticide licensees, registering nearly 12,000 each year. Loss of the system would result in significant manpower increases to manually track licensing requirements and payment status.
EOL	EOL	Private	PII		3.5	This system is used to record and document approximately 3,500 annual inspections by the Pesticide and Structural Pesticide divisions. Loss of the system would result in significant manpower increases to manually track licensing requirements and payment status.
EOL	EOL	Private	PII		3.5	This system is used to manage our Brand program. There are approximately 5,000 active brands currently. Loss of this system would require some type manual tracking of brands, and a manual process of registering brands every 5 years.
EOL	EOL	Private	PII		3	This system manages 16 different programs totaling over 5,500 certifications and permits. Loss of the system would result in significant manpower increases to manually track licensing requirements and payment status.
EOL	EOL	Private	N/A (none)		3	This system is used to enter time for payroll purposes for a few employees. We're in the midst of moving all of those employees to direct CATS entry.
EOL	EOL	Private	N/A (none)		3	Interface from Pepsi to AgChem.
EOL	EOL	Private	PII		3	Track bollweevil eradication program & spraying of fields
EOL	EOL	Private	PII		3	This system is used to manage the market coupon program for seniors and WIC recipients.
EOL	EOL	Private	N/A (none)		3	We currently use a number of 3rd party websites and spreadsheets to track animals, diseases, and animal movement.

EOL	EOL	Private	N/A (none)	3	This system is used to recognize incoming payments, and allocating them to the appropriate funds. In calendar 2017 there were over 28,000 payments processed with over 47,614 allocations. Loss of this system would require a mammoth manual process.
EOL	EOL	Private	N/A (none)	2.5	Tracks stumpage fees as collected by the Louisiana Department of Revenue. This system tracks stumpage fees by parish, by month for different species and form of wood. Loss of this system would require the manual tracking of 17,000 data points per year.
EOL	EOL	Private	N/A (none)	2.5	This system is a document management system that is used to track over 20,000 per year EIA forms for the Animal Health division.
EOL	EOL	Private	N/A (none)	2.5	Need will diminish with implementaiton of replacement system(s).
EOL	EOL	Private	N/A (none)	2.5	Miscellaneous reports for in-house users.
EOL	EOL	Private	PII	3	Track sweet potato weevil traps across the state.
EOL	EOL	Private	N/A (none)	2.5	We currently use spreadsheets and paper forms to document and register the production of dairy products.
EOL	EOL	Private	N/A (none)	2.5	Used for array of purposes by LDAF employees.
EOL	EOL	Private	N/A (none)	1.5	The current process utilizes a home grown inventory system, and spreadsheets to manage food commodity fulfillment. A new system would provide comprehensive functionality, including online order request by the school districts instead of the manual fax and paper system in use today.
Acceptable	Acceptable	Private	CJIS	0.5	Used by the Forestry Enforcement group.
Acceptable	Acceptable	Public (Internet)	PII	1	This system manages approximately 14,000 licenses for scales and scanner use, 5,500 weighmasters, 1,000 scale technicians, and 250 scale service agencies. Loss of the system would result in significant manpower increases to manually track licensing requirements and payment status.

Acceptable	Acceptable	Private	N/A (none)	1	Track ag commodities for Animal Health.
Acceptable	Acceptable	Private	N/A (none)	1	This is the inspection program used in the inspection of Scales, Scanners, and Flow Meters.
Acceptable	Acceptable	Public (Internet)	N/A (none)	0.5	This system manages approximately 1,600 seed dealers in the state, and manages inspections and sample testing for the same. Loss of the system would result in significant manpower increases to manually track licensing requirements and payment status.
Acceptable	Acceptable	Public (Internet)	N/A (none)	0.5	This system manages approximately 3,000 companies that register approximately x Pesticides and animal pharmaceuticals per year. Loss of the system would result in significant manpower increases to manually track licensing requirements and payment status.
Acceptable	Acceptable	Public (Internet)	N/A (none)	0.5	This system manages over 200 fertilizer manufacturers and tracks their quarterly production. Loss of the system would result in significant manpower increases to manually track licensing requirements and payment status.
Acceptable	Acceptable	Public (Internet)	N/A (none)	0.5	This SAAS product is currently used to administer tests to individuals for the purpose of obtaining certifications to use pesticides. Initiated in August of 2017, it has already been used to administer over 1,200 tests. It is expected that we will utilize it for our Horticulture tests in the near future. Loss of this system would result in the manual scoring of each of these tests, and the manpower necessary to do so.
Acceptable	Acceptable	Private	PII	0.5	This system is used to manage the Forest Productivity Program for over 7,500 landowners. Loss of the system would require it's replacement with a manual process.
EOL	Acceptable	Private	N/A (none)	0.5	This system is used to manage the requisition process in LDAF for over 1,100 requisitions per year.
Acceptable	Acceptable	Private	PII	0.5	This system is used to track deer farm licenses.

Acceptable	Acceptable	Public (Internet)	N/A (none)	0.5	Used by USDA employees working under the guidance of the LDAF S&W Office.
Acceptable	Acceptable	Private	N/A (none)	0	Used to manage access to LDAF buildings.
Acceptable	Acceptable	Public (Internet)	N/A (none)	0.5	Used to manage Internet access for all LDAF employees.
Acceptable	Acceptable	Private	N/A (none)	0	This system manages approximately 500 feed manufacturers in the state. Loss of the system would result in significant manpower increases to manually track licensing requirements and payment status.
Acceptable	Acceptable	Private	N/A (none)	0	Loss of this system would require a manual ticketing and tracking system for all of the problems and requests received by IT.
Acceptable	Acceptable	Private	N/A (none)	0	This system is used to manage inventory and allocation of supplies within LDAF. Loss of this system would require a cumbersome manual process, and the manpower to maintain the inventory and re-order.
Acceptable	Acceptable	Private	N/A (none)	0	This system is used to manage the LDAF fleet of over the road vehicles and other equipment including bulldozers for fire fighting. Loss of this system would require a significant manual system tracking maintenance, mileage, and fuel expenditures by vehicle.
Acceptable	Acceptable	Private	N/A (none)	0	Track issue of grain, elevator & grader sampler licenses
Acceptable	Acceptable	Private	N/A (none)	0	Used to create fire weather map on LDAF web site.
Acceptable	Acceptable	Private	N/A (none)	0	Track inventory for Forestry Office.
Acceptable	Acceptable	Private	N/A (none)	0	Enter & track purchase requests for LAFA.
Acceptable	Acceptable	Private	N/A (none)	0	Maintains certificates and veterinary forms.
Acceptable	Acceptable	Private	PII	0.5	Track turtle farm licenses
Acceptable	Acceptable	Private	PII	0.5	Maintain sugarcane licenses and print id cards
Acceptable	Acceptable	Private	N/A (none)	0	Maintain lab results.
Acceptable	Acceptable	Private	N/A (none)	0	Manage LDAF backup/restore program.
Acceptable	Acceptable	Private	N/A (none)	0	Used by IT to maintain and update servers and client computers.
Acceptable	Acceptable	Private	N/A (none)	0	Used by IT to maintain list of active and historical helpdesk tickets.

Acceptable	Acceptable	Private	N/A (none)	0	Used to manage all incoming and outgoing faxes.
Acceptable	Acceptable	Private	N/A (none)	0	Used to manage nearly all LDAF servers.
Acceptable	Acceptable	Private	N/A (none)	0	Used by LDAF personnel to manage their own passwords and active directory information.

Recommendations	Cost	Dedicated Source of funding	Agency Priority
Project to replace in calendar 2018.	$95K	PO issued	High
RFP in works to replace.	$250K (estimate)	No	High
Negotiating with 3rd party to replace	$150K (estimate, in total with Animal Traceability)	No	High
RFP in works to replace.	$650K (estimate)	No	High
Convert 100% of the agency to LEO timekeeping exclusively. 5% unconverted.	Maintained by LDAF IT staff.	No	High
Replaced with Pesticide Inspection system.	See $250K estimate for Pepsi replacement.	No	High
In house rewrite or replace.	Unknown.	No	Medium
Explore marketplace for existing solutions or re-write in-house only if necessary.	Unknown.	No	Medium
Negotiating with 3rd party to replace	$150K (estimate, in total with Brand Tracking)	No	High

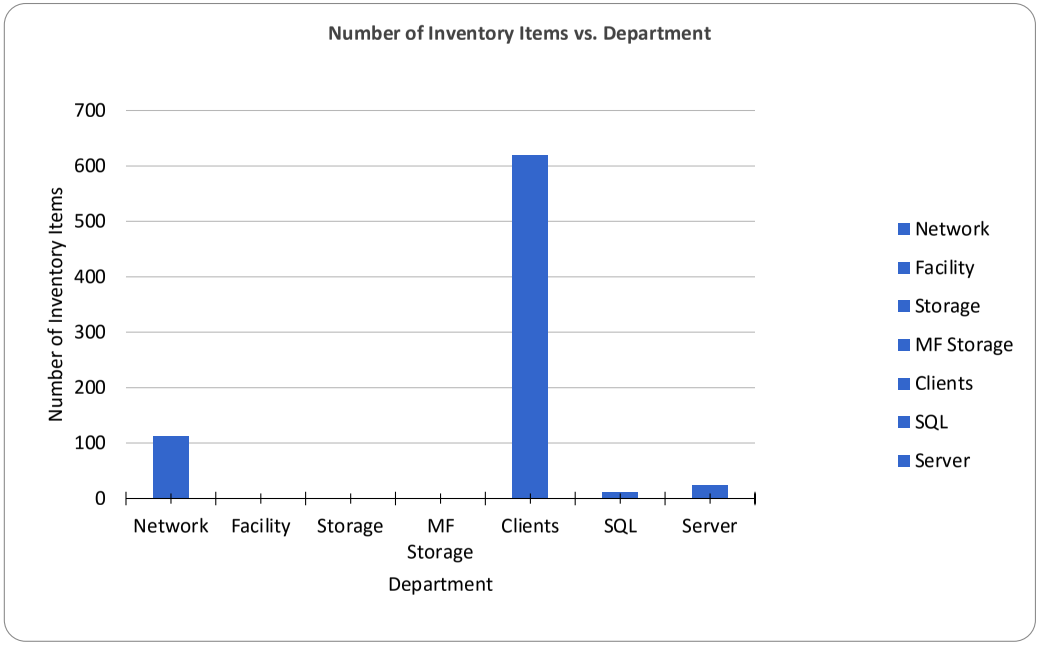
Replace. Slated to be re-written in fiscal 2018.	Maintained by LDAF IT staff.	No	High
Replace	Re-write by LDAF staff and/or 3rd party.	No	Medium
This system would no longer be needed with the implementation of a system to support Animal Traceability.	$150K (estimate, in total with Brand Tracking and Animal Traceability)	No	High
Once continued need is determined, make action plan.	Unknown.	No	Medium
Reporting needs not met by new systems will be provided via SSRS.	None	No	Medium
Rewrite in house or replace.	None	No	Medium
New software purchased, not yet implemented.	$29,750/year (covers multiple USAplants apps)	No	Medium
In house rewrite or replace.	None	No	Low
Gathering requirements for software selection. This will require an RFP.	$150K (estimate)	No	High
Provided/supported by LA Commission on Law	Maintained by LA Commission on Law	No	Low
Maintain maintenance agreement	$29,750/year (covers multiple USAplants apps)	No	High

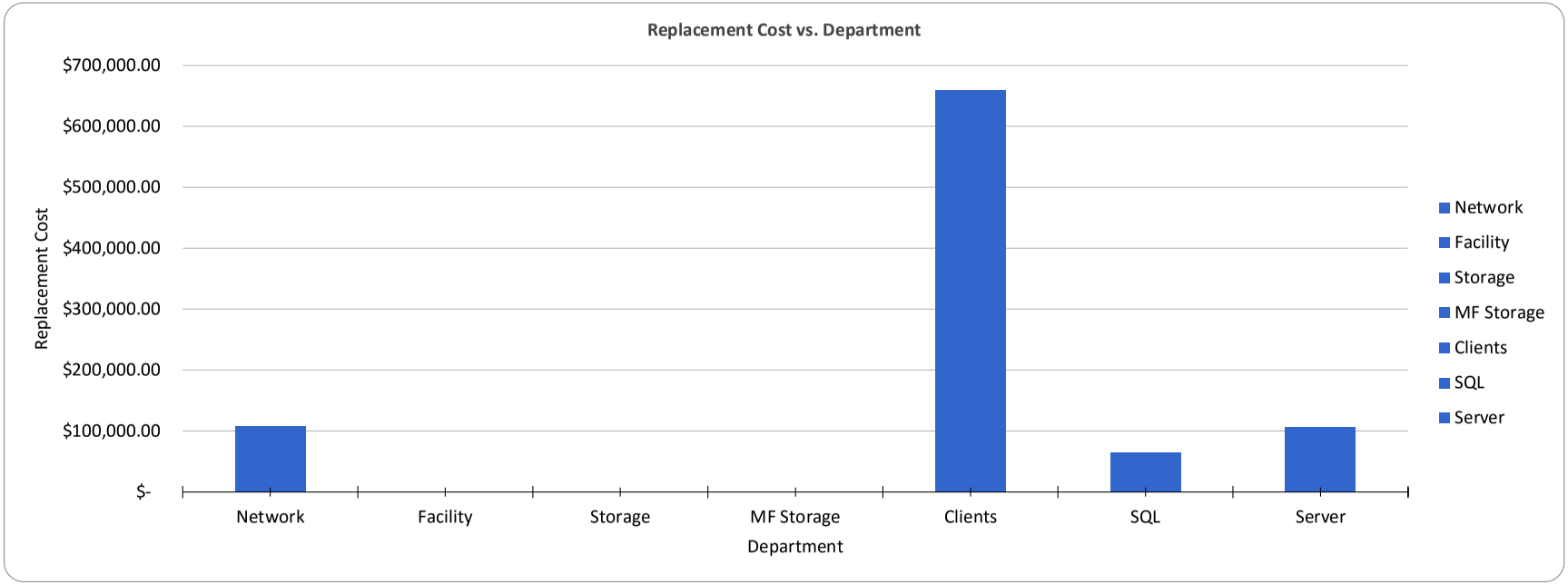
Replace EOL	Re-write by LDAF staff.	No	Medium
Maintain maintenance agreement	$32,000/year maintenance	No	High
Maintain maintenance agreement	$29,750/year (covers multiple USAplants apps)	No	High
Maintain maintenance agreement	$29,750/year (covers multiple USAplants apps)	No	High
Maintain maintenance agreement	$29,750/year (covers multiple USAplants apps)	No	High
Maintain annual subscription	$5.5K/Year subscription	No	High
No action needed.	Maintained by LDAF IT staff.	No	Low
None planned.	Maintained by LDAF IT staff.	No	Low
None planned.	Maintained by LDAF IT staff.	No	Low

None planned.	Maintained by LDAF IT staff.	No	Low
None planned.	Maintained by LDAF IT staff.	No	Low
Maintain subscription.		No	High
Maintain maintenance agreement	$29,750/year (covers multiple USAplants apps)	No	High
Maintain maintenance agreement	$3,700/year maintenance	No	Medium
At some time in the future, we may opt to replace with a COTS application.	Maintained by LDAF IT staff.	No	Medium
Maintain maintenance agreement	$23,931/year. The newest version of the software requires an upgrade to the underlying database, at $65K.	No	High
No action needed.	Maintained by LDAF IT staff.	No	Low
No action needed.	Maintained by LDAF IT staff.	No	Low
No action needed.	Maintained by LDAF IT staff.	No	Low
No action needed.	Maintained by LDAF IT staff.	No	Low
Replaced by implementation of Animal Traceability system.	Included under Animal Traceability system cost.	No	Low
No action needed.	Maintained by LDAF IT staff.	No	Low
No action needed.	Maintained by LDAF IT staff.	No	Low
Upgrade planned for Feb. 2018	$17,800/year.	No	High
Continue subscription service.	$24,200/year.	No	High
Continue maintenance.	$3,800/year.	No	High
Continue maintenance.	$3,700/year.	No	High

Continue subscription service.	$7,700/year.	No	High
Continue maintenance.	$4,900/year.	No	High
Continue maintenance.	$3,700/year.	No	Low

Department	Number of Inventory Items		Replacement Cost	
Network		112	$	108,266.00
Facility		0	$	-
Storage		0	$	-
MF Storage		0	$	-
Clients		620	$	660,300.00
SQL		11	$	65,000.00
Server		25	$	106,400.00
All HCR 121 Infrastructure Inventory		**768**		**$939,966.00**




Replacement Cost vs. Department
$700,000.00
$600,000.00
$500,000.00
$400,000.00
$300,000.00
$200,000.00
$100,000.00
$-
Replacement Cost
Network
Facility
Storage
MF Storage
Clients
SQL
Server
Department
Network
Facility
Storage
MF Storage
Clients
SQL
Server

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APPENDIX 16: ELECTED OFFICALS – DEPARTMENT OF CULTURE, RECREATION, AND TOURISM

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Department of Culture, Recreation and Tourism and Office of Lieutenant Governor

Status of Mission Critical Information Technology Systems

This report addresses the requests for information in LA HCR 121 "to study the current status of mission critical information technology systems in the agencies of the executive branch of state government to determine the risks posed and the costs of continued operation of outdated or ineffective information technology." The report is structured to address each query under item 2, a-e in the body of HCR 121

2.a Identification of systems that are inefficient, recommendations for improvements of such inefficient systems, and potential costs and cost savings of such improvements.

Information Technology Infrastructure

The Department of Culture, Recreation and Tourism and Office of Lieutenant Governor (DCRT/OLG) have few mission critical information technology systems running on outdated or ineffective information technology infrastructure. Slow, legacy T1 data circuits introduce the only inefficiencies in the Department's otherwise modern, efficient IT infrastructure. Desktop and Data Center equipment is purchased with 5 years of maintenance. When maintenance expires the equipment is replaced. Desktop productivity and applications software are current; version upgrades are covered through enrollment in software assurance programs. Microsoft server, software and licensing is provided through a Microsoft Enterprise Agreement. IT systems are briefly described below to document status and efficiency of components.

Network (wired)

The Department's mission critical wide area network (WAN) that serves 63 locations statewide is under constant upgrade, improvement and expansion. The department's main internet circuit is augmented by high speed Cox Wi-Fi that's distributed over the 2nd through 5th floors of the State Capitol Annex. Routers, firewalls, switches, access points and related indoor and outdoor Wi-Fi network equipment are up-to-date with repair or replacement covered by maintenance agreements.[1] Mission critical network components including the main routers, next-gen enterprise firewalls and managed smart switches are covered by 4x7x365 maintenance contracts necessary to ensure 99.7+ network uptime in DCRT/OLG's offices in the Annex.

[1] Where maintenance is not cost effective agencies do not enroll. Instead they purchase a spare and store it until it is needed. Maintenance is deemed non-cost effective when the annual maintenance cost for a group of identical, non-mission critical units exceeds the cost of a single unit.

Wired network inefficiencies

Many remote LANs run at sub-broadband speed (1.5MB) over extremely costly legacy T1 circuits. It is cost prohibitive to improve the speed of these circuits which limit the productivity of State Park and State Historic Site employees. High bandwidth Ethics and Sexual harassment training videos delivered over the slow circuits frequently drop signal forcing Park employees to go back and start training over from the beginning, which wastes their time and lowers their efficiency. Sub-broadband T1 circuits slow State Park and Historic Site access to web based state financial systems, state property control, workflow and many other LaGov features including Louisiana Employees Online (LEO) where time and attendance is recorded by employees and approved by managers. Inadequate bandwidth at the remote facilities results in reduced efficiency by staff at remote sites, all of whom are required to access to one or more web based application.

Inadequate bandwidth also slows or halts reservation processing inconveniencing overnight guests trying to check in at State Park entry stations. Slow web access over legacy T1 data circuits degrades all point of sale (POS) dependent processes like canoe rentals.

Resolution of wired network inefficiencies

Two options could address the circuit speed problems with legacy T1 circuits at remote Parks and Historic Sites. The Division could negotiate better pricing with AT&T or identify another vendor with lower prices making multiple T1 circuits more cost effectively. This is not a practical or technologically sound solution. At best, addition of only 3 more T1 circuits is practical with existing routers. That would only provide 6MB. The second, more practical solution is adaptation of new technology like cellular internet described below under public Wi-Fi.

Network (public Wi-Fi)

The Department provides the public with free access to the internet over Wi-Fi at 11 tourism welcome centers and 21 state parks. Although public Wi-Fi is not mission critical, it is an amenity that's expected and often required by overnight guests at the State Parks. Public Wi-Fi signal quality is dependent on the speed of the State Parks internet circuit(s). There are no problems with indoor and sheltered Wi-Fi in the Welcome Centers. Public Wi-Fi at all centers has been migrated to very fast internet circuits. Here focus will turn to public Wi-Fi in the State Parks where there are problems.

Public Wi-Fi inefficiencies

Inadequate bandwidth resulting in slow web performance angers overnight guests in costly cabins and campsites at State Parks. They expect and depend on fast, reliable Wi-Fi. Many overnight guests will not tolerate minute long web page loads. Inadequate bandwidth alienates 10% to 25% of visitors who

will not return to overnight at a State Park facility with such limited access to the web. Thus, failure to provide fast web access via Wi-Fi to overnight guests lowers the occupancy rate, which reduces Park income.

Resolution of public Wi-Fi inefficiencies

Parks has responded to the public's demand for true broadband Wi-Fi by installing cutting edge cellular internet that's generally available even at even the most remote Parks. Cellular internet speeds of 20-60+ MB have been achieved through cellular conversion. That's 26x – 80x faster than the 750KB Park guests must share at Parks with only T1 circuits. Unlimited data over cellular internet service costs only $50/month, which is a tiny fraction of the ca. $700/month cost for the T1 circuits.

Parks are rapidly deploying cellular internet with the goal of providing 5MB inside cabins and 3MB inside RVs in camping loops. At these speeds, cabin visitors will be able to stream full 1080x1920 HD video, while RV campers will have enough bandwidth to stream 720x1080 HD video. Complaints about slow Wi-Fi, the most common complaint at the State Parks all but cease at parks where public Wi-Fi has been converted to cellular internet.

Maintenance of the extensive outdoor Wi-Fi installations at remote State Parks is challenging. Serial budget cuts over a 9 yearlong period stripped all State Park maintenance funding, including funding for the costly repair of public Wi-Fi installations at State Parks. Parks with broken Wi-Fi installations anger overnight guests and alienating the same 10-25% of visitors that will not overnight anywhere without adequate Wi-Fi. Permanent loss of these guests who communicate their dissatisfaction with State Park Wi-Fi to their circle of friends reduces occupancy and revenue. The Department recognizes the peril poised by broken Wi-Fi installations at the Parks.

The Department added a Wi-Fi field network technician position with sole responsibility for maintaining the State Park public Wi-Fi installations to address repair and enhancement of the public Wi-Fi system. The technician is quickly repairing broken Wi-Fi installations. He converts Wi-Fi to Cellular Internet at each site after completing repair work. He also improves Wi-Fi signal quality by installing new Wi-Fi radios to cover areas with weak coverage.

Cost Savings

State Parks and Tourism are saving close to $100,000 in annual data service charges after replacing very costly T1 circuits with much faster, inexpensive cellular internet.

Another significant savings that allows Parks to improved Wi-Fi coverage without additional funding is the reduction in cost for the Tropos 5210 Wi-Fi

radios used in the public Wi-Fi installations. It is now very inexpensive to increase the density of Wi-Fi radios because the radios cost next to nothing. The 5210 Tropos Wi-Fi radios that cost $2,500 each when Parks built the public Wi-Fi system can now be acquired in remaindered lots for $25-$75. The 52MB speed of the Tropos 5210 radios is faster than the cellular internet they access to reach the Web so the ca. 2007-2008 radios provide an ideal, extremely cost effective solution, for propagating Wi-Fi over cellular internet.

Security

The Department's current security posture is maintained at the network level by a high availability pair of Next-Gen firewalls with advanced security services that include content filtering, intrusion prevention, anti-spyware, botnet filtering, gateway anti-virus, geo-IP filtering, and SSL inspection. The Department also deploys a separate standalone content filter and have secondary monitoring on public traffic from OTS's security infrastructure. Email delivery is secured via spam and malware filters prior to entry to our mail servers. The endpoint devices utilize enterprise grade malware/spyware protection and are also maintained with a centrally managed patching platform.

Servers, services and applications

DCRT runs current, fully supported, up-to-date versions of MS Server, MS SQL Server, MS Exchange Server and MS IIS Web Server among others including an ESRI ArcGIS Enterprise Server, Document Management server Workflow server and a Content Management Server. Mission critical systems including workflow, email, security, web services and others run on modern servers that provision processors, cores and RAM resources for a fully virtualized server topology. Virtual servers access storage on a robust, enterprise Storage Area Network (SAN); stored data is compressed, de-duplicated and backed up on a full disk backup server. Applications and network infrastructure are regularly refreshed and maintained under hardware and software maintenance and licensing contracts. All Microsoft Servers, MS services, MS licensing, MS Office Desktop Productivity Suite, MS upgrades and MS support are provided through a recurring 3-year Microsoft Enterprise agreement.

2.b Identification of points of risk of failure of aging systems, estimates of the social and economic impacts of any such failure, and potential costs and risk reductions gained by updating such systems.

Mission-critical and Business-critical Services

Below is a review of the fiscal and socioeconomic consequences of the failure of key DCRT/OLG IT infrastructure. That will be followed by review of the cost-effectiveness of updating the systems or replacing them with entirely new technologies that have evolved since legacy systems were installed. Before proceeding, it is important to understand the Department's mission-critical and business-critical services.

The Department has no Level 1 commissioned mission-critical or business-critical services. Nobody dies or fails to receive necessary, time-sensitive medical, monetary or emergency services if all the Department's systems crashed. No money is lost at POS stations in State Parks, State Historic Sites, State Museums, or Black Bear Golf course if the network goes down. All IT systems that collect and report monetary transactions fail over to integrated manual systems when power or data circuits go down. The manual systems revert to normal networked solutions gracefully through full, auto recovery after data and or power service is restored. Data collected locally is queued and sent to the main reservation system. The main reservation system downloads new reservations to the local system that accumulated while the park client was down.

Mission-critical and business-critical services are described below. After each description, dependencies described above under IT Infrastructure are listed along with any dependencies unique to the service or function not included above.

IT in support of the Lieutenant Governor who serves as governor when the governor is out of state or unable to act as governor. All dependencies are supported by the systems described above.

Dependencies

1. Secure reliable WAN with redundant internet circuits,
2. VPN access to desktop and network resources on the WAN,
3. Secure, reliable email, scheduling, contacts and calendar,
4. Remote access to services and applications from a responsive interfaces legible and functional on the small smart phone or tablet screen,
5. Dependable cellular service
6. Wi-Fi service.

Risk(s) of Failure

There are no risks of failure related to old, worn out legacy IT. There is enough redundancy in the modern, up-to-date communication options that there is little risk of any communication failure. The Lieutenant Governor has access to multiple land lines, cell phone, MiFi device and Enterprise Wi-Fi. His email, schedule, address book and calendar are backed up securely.

Reserve America reservation processing and POS/credit card processing for 21 state parks and entrance fee POS and credit card processing at 18 state historic sites. Reserve America provides third party web and call center based reservation service for State Park's overnight facilities and Point of Sale (POS) for walk-ins without pre-paid reservations, gift shop purchases, canoe, boat, pavilion, meeting room, golf carts and other rentals.

Dependencies (service provider)

1. Secure e-commerce reservation website
2. Secure Call Center for Reservations placed over the phone.
3. Secure credit card processing PCI DSS 3.2 security standard compliant with up-to-date annual Self-Assessment Questionnaire (certified) and quarterly penetration testing (certified).
4. Reliable data backup and recovery of State Parks reservations and the reservation website.

Dependencies (client)

1. Secure, reliable LAN connection(s) to the Department WAN.
2. Secure, functional POS workstation under 5 year hardware maintenance, running the Reserve America client software application that efficiently confirms reservations and processes guest registrations, credit card reader, cash box, receipt printer and small laser printer.
3. Browser with strictly limited functionality that can only access specific, white listed domains to prevent random web surfing that might infect the POS workstation and endanger the Reserve America server.
4. Secure, functional POS stations with credit card reader, cash box and receipt printer, for processing purchases and rentals
5. Domain restricted VPN remote access for maintenance, configuration, patches, updates, troubleshooting and reporting by the system administrator in Baton Rouge and technicians at Reserve America.
6. Manual failover to fully functional local reservation client after data circuit or power cut
7. Automatic recovery from manual to networked with all data collected locally automatically passed over network to Reserve America server and all reservations processed by reserve America server passed on to local computer.

Risk(s) of Failure

There are no risks to the State Park reservation system related to potential failure of old, legacy equipment. T1 data circuits that link clients in the Parks to servers at Reserve America are slow and rely on legacy technology but the network infrastructure they run on including routers and switches are new. The T1 circuits (telephone wires) go down occasionally, but AT&T usually gets them back up and working properly within 4-6 hours. The Department's intention to replace the T1 circuits was explained above under wired network infrastructure.

Ticket sales POS at 6 Louisiana State Museums.

The Louisiana State Museum uses Gateway's Galaxy ticketing application for walk up paper ticket sales to individuals and groups at 6 Museums located statewide. It reports sales data back to the Galaxy server in Baton Rouge. It performs POS functions like secure credit card processing. It includes a range of different demographic and sales reports.

Dependencies:

1. Secure LAN connection between local museum client and the Galaxy and Payment servers in the Baton Rouge data center.
2. Secure, functional POS workstation with touch screen and 5 year hardware maintenance.
3. Cash box, ticket printer and receipt printer.
4. Installed Gateway Galaxy ticketing client application with simple touch screen GUI for entering number and type of tickets required, machine calculated total and payment options that include secure, PCI DSS compliant credit card transaction processing.
5. Full range of demographic and sales reports on server accessible to the administrator for auditing and visitation review
6. Domain restricted VPN remote access for maintenance, configuration, patches, updates, troubleshooting and reporting by the system administrator in Baton Rouge and technicians at Gateway.
7. Manual failover to fully functional local ticket sales client when the data circuit is cut.
8. Automatic recovery from manual to network after restoration of connectivity or power that sends all data collected locally during the outage to the Galaxy server.

Risk(s) of Failure

None related to old, legacy technology past the published end of its use life. The Department addressed this issue recently by migrating the State Museum's Galaxy ticket and Payment servers from 7 year old out of warranty servers in the New Orleans data center to virtual servers in the Department's main data center in the annex.

Green fee reservation and scheduling

The Office of State Parks manages Black Bear Golf Course near Delhi in northeast Louisiana. Tee times are scheduled in advance over the web or locally by walk ups. Reserve America runs the website and main application on a server at their data center. A client piece running locally at the Black Bear pro shop provides a schedule of reserved, paid tee times and group sizes. The schedule is used by Black Bear staff to confirm and check off paid reservations as golfers arrive to begin their game. The simple hosted POS application also records and processes sales in the pro shop and schedules tee times for walk ups.

Dependencies (service provider)

1. Secure e-commerce Tee time reservation website
2. Secure credit card processing PCI DSS compliant
3. Reliable data backup and recovery of Black Bear Tee Time data and the tee time reservation website.

Dependencies (client)

1. Secure internet connection between the client application at the Pro shop and the server at Reserve America's data center.
2. POS computer running client application for processing walk up tee time reservation and pro shop sales
3. Web and walk up tee time scheduling, cash management and reporting features.
4. Secure credit card processing that conforms to the PCI DSS security standard.
5. Automated daily downloads of new tee time reservations from the Reserve America website to the Black Bear client updating the local database with newly scheduled tee time reservations with search and lookup features that provide scheduling reports of pre-paid tee time reservations and booking new tee times when data circuit fails.
6. Automatic upload of new walkup tee time reservations and sales from the pro shop to Reserve America and download of tee time reservations scheduled on line to the pro shop from Reserve America when internet connectivity is restored.

Risk(s) of Failure

None related to old, legacy technology that's past the published end of its use life.

Department-wide email

The Department runs Exchange email servers that provide email, calendar, scheduling, address list and collaboration to over 600 employees at 63 remote sites statewide. The system includes primary and secondary Exchange servers that run concurrently so if the primary goes down it fails over to the secondary server. No email is lost, no meeting scheduled disappears and the address list remains current.

Dependencies

1. Access to the LAN, WAN and Internet.
2. Functional electrical and HVAC in the data center where the Exchange servers are installed.
3. Two healthy physical blade servers, one for each Exchange server.
4. Properly synced primary and secondary Exchange servers.
5. Current, supported version of Exchange Server installed
6. Knowledgeable Exchange Server technician on staff
7. Blade server hardware maintenance
8. Exchange server software maintenance
9. Sufficient storage on the SAN

Risk(s) of Failure

None related to old, legacy technology that's past the published end of its use life.

Workflow

The Department relies on Workflow for permission to purchase, permission to hire and many other crucial actions that require multiple signatures in an approval chain. Workflow speeds the approval process up dramatically from 3-5 days to minutes if all approvers in the workflow are available. Approvers in each workflow chain install a workflow app on their mobile devices so they may approve or deny from anywhere they have a cell or Wi-Fi signal.

Dependencies

1. Dependable server and dependable LAN, WAN and internet connection
2. Healthy, functional Hyland OnBase workflow application properly installed and configured.
3. Properly configured workflows with appropriate approvers at each level.
4. A skilled, knowledgeable workflow programmer on staff.
5. A backup workflow programmer who can make adjustments as necessary to the approval chain.

Risk(s) of Failure

None related to old, legacy technology that's past the published end of its use life.

(c) Identification of risk of unauthorized access, loss or corruption of data, and exposure to malicious software, the severity of such risks, estimates of the social and economic impacts of any such attack, and potential costs and risk reductions gained by updating such systems.

Low risk of unauthorized access to data per security posture described above in IT Infrastructure section. The Department's evolving, dynamic security system has successfully prevented unauthorized access for the last 32 years since the Department installed the first personal computer. The Department intends to move end point security to the cloud where it can be improved by predictive modeling that aggregates evolving threats in real time from millions of monitored computers. This provides proactive, predictive protection from known and unknown, zero day exploits. The report goes into more detail regarding cloud based, predictive end point security below in section e.

Low liability from unauthorized access to Department data, because 99.9% is public domain the Department would be delighted to share, Low danger to malicious destruction of Department data which is backed up to a disk based backup system. Greater exposure to server corruption is mitigated by storing images of server configurations on storage servers in the Department's New Orleans data center.

Department is a low value target and purposefully kept that way by storing no credit card information or sensitive personally identifiable information on servers or desktop computers. Credit card and personally identifiable information is only briefly stored during merchant services processing, with a subset of scrubbed date (last 4 digits of credit card) stored by reservation services and POS provider Reserve America upon completion of merchant services processing. Reserve America is PCI DSS 3.2 security compliant. The company's servers are subject to four intense vulnerability scans annually with the results certified by a 3rd party.

The web store eTicket credit card transaction information is saved briefly during merchant services processing, then scrubbed and stored on Gateway (contractors) server. There will be no local copy of the eTicket credit card or personally identifiable information stored on a server in the Department. Gateway's eGalaxy server is PCI DSS compliant.

The tee time scheduling application data and payment processing by Reserve America is awarded the same protections as the State Parks reservation system described above.

(d) Identification of technology fees and other sources of revenue that are dedicated

to technology needs of a state agency.

None other than an IAT from the Division for telephone service and data circuits and a second IAT from the Division to pay the Office of Information Technology for unidentified services.

(e) Recommended priorities for upgrades considering all such costs, liabilities, and benefits.

The Department intends to upgrade desktop PC's from near end of life Windows 7 to the Windows 10 professional operating system in FY18-19. The expense will be covered by a Microsoft Enterprise Agreement.

The Department will refresh servers, storage and network equipment in the data center as it drops off maintenance at the end of its 5th year of warranty. The Department is working with a vendors to get costs to lease equipment to refresh components in the data center.

The Department will replace PC's and laptops that are out of their 5 year warranty by the middle of FY 18-19 if funding is available. This is a common, best practices approach that ensures desktop hardware is not orphaned by evolving software and hardware technologies. It sharply reduces significant loss of data when hard drives crash. It ensures consistent employee productivity uninterrupted by computer problems that may require 8 to 12 work hours before a new part arrives and is installed.

The Department is considering new endpoint security options that better address the growing number of different destructive exploits that plaque the cyber community. There's serious concern that signature based anti-malware is useless against the increasing number of 0-day exploits. Cloud based offerings employ a Big Data approach that aggregates evolving threats in real time from millions of monitored computers. This provides proactive, predictive protection from both known and unknown attacks. They also look for unique or uncommon patterns of software behavior that may flag contagion or an exploit.

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APPENDIX 17: ELECTED OFFICALS – DEPARTMENT OF THE TREASURY

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Internal ID	Tag #	Device Name	Description	End of Life
FDO1816B0Q2	92400-002029	CISCO SWITCH CAT2960-XR 48	Location: 21st Capitol	No EOL announced
FDO1709Z066	92400-001937	CISCO 48 PORT SWITCH WS-C3560X-48T-S	Location: 3rd Capitol	No EOL announced
FDO1717R27E	92400-001938	CISCO 48 PORT SWITCH WS-C3560X-48T-S	Location: 3rd Capitol	No EOL announced
FDO1816B08T	92400-002028	CISCO SWITCH CAT2960-XR 48	Location: 1st Annex	No EOL announced
FDO1816B08L	92400-002031	CISCO SWITCH CAT2960-XR 48	Location: 1st Annex	No EOL announced
FDO1811B089	92400-002032	CISCO SWITCH CAT 2960-XR 48	Location: 1st Annex	No EOL announced
FDO1816B09J	92400-002030	CISCO SWITCH CAT2960-XR 48	Location: ISB	No EOL announced
FDO1811B073	92400-002033	CISCO SWITCH CAT 2960-XR 48	Location: ISB	No EOL announced
89GKDX1	92400-001958	PowerEdge R620	Host Server	5/8/2020
89HHDX1	92400-001959	PowerEdge R620	Host Server	5/8/2020
CJ6PKS1	92400-001922	Dell equalogic PS4100X	Storage Array	3/21/2019
CJ6NKS1	92400-001923	Dell equalogic PS4100E	Storage Array	3/21/2019
662FC42	92400-002038	Dell EqualLogic PS6210E	Storage Array	6/1/2022
65YKC42	92400-002039	Dell EqualLogic PS6210X	Storage Array	5/29/2022
3XJRV12	92400-002025	Appassure1 DL4000	File Level Backup/Recovery	5/31/2020
3VCRV12	92400-002027	Appassure1 MD1200	File Level Backup/Recovery	5/31/2020
3XJTV12	92400-002024	Appassure2 DL4000	File Level Backup/Recovery	5/31/2020
3VCTV12	92400-002026	Appassure2 MD1200	File Level Backup/Recovery	5/31/2020
		Fortigate 200E Firewall	Firewall	N/A
		Fortigate 200E Firewall	Firewall	N/A
N/A		Fortigate 100E	Router	N/A
N/A		Fortigate 100E	Router	N/A
BAR-SF-648250	92400-002037	Barracuda Spam and Virus Filter	Model: 300	N/A
BAR-MA-528143	92400-001961	BARRACUDA MESSAGE ARCHIVER	Model: 350	N/A
FGL1819W5FE	N/A	AP-LDOT-22	Model: AIR-CAP1602I-A-K9	No EOL announced
FGL1819W5FB	N/A	AP-LDOT-11	Model: AIR-CAP1602I-A-K9	No EOL announced
FGL1819W5GD	N/A	AP-LDOT-20	Model: AIR-CAP1602I-A-K9	No EOL announced
FGL1819W5FC	N/A	AP-LDOT-10	Model: AIR-CAP1602I-A-K9	No EOL announced
FGL1819W5G9	N/A	AP-LDOT-12	Model: AIR-CAP1602I-A-K9	No EOL announced
FGL1819W5FA	N/A	AP-LDOT-24	Model: AIR-CAP1602I-A-K9	No EOL announced
FGL1819W5FD	N/A	AP-LDOT-23	Model: AIR-CAP1602I-A-K9	No EOL announced
FGL1819W5G1	N/A	AP-LDOT-21	Model: AIR-CAP1602I-A-K9	No EOL announced

End of Support	Estimated Replacement Cost	Impact of Failure
Under Warranty Extension	4,000	Loss of connectivity to computers…route to AP or other switches
Under Warranty Extension	4,000	Loss of connectivity to computers…route to AP or other switches
Under Warranty Extension	4,000	Loss of connectivity to computers…route to AP or other switches
Under Warranty Extension	4,000	Loss of connectivity to computers…route to AP or other switches
Under Warranty Extension	4,000	Loss of connectivity to computers…route to AP or other switches
Under Warranty Extension	4,000	Loss of connectivity to computers…route to AP or other switches
Under Warranty Extension	4,000	Loss of network connectivity…move to Fortigate 200E open ports…move into DR mode
Under Warranty Extension	4,000	Loss of network connectivity…move to Fortigate 200E open ports…move into DR mode
5/9/2018 then under Warranty Extension to EOL	15,000	Loss of connectivity to VMs…VM failover to other Host or Move into DR Mode
5/9/2018 then under Warranty Extension to EOL	15,000	Loss of connectivity to VMs…VM failover to other Host or Move into DR Mode
Under Warranty Extension to EOL	N/A	Move into DR Mode
Under Warranty Extension to EOL	N/A	Move into DR Mode
6/2/2020 then under Warranty Extension to EOL	35,000	Move into DR Mode
6/2/2020 then under Warranty Extension to EOL	35,000	Move into DR Mode
Under Warranty Extension to EOL	10,000	Primary/Move to Backup
Under Warranty Extension to EOL	10,000	Primary/Move to Backup
6/15/2018 then under Warranty Extension to EOL	10,000	Backup/Primary Available
6/15/2018 then under Warranty Extension to EOL	10,000	Backup/Primary Available
State Contract Service Provider	N/A	Redundant/Move into DR Mode
State Contract Service Provider	N/A	Redundant/Move into DR Mode
State Contract Service Provider	N/A	
State Contract Service Provider	N/A	
Built in Hardware Refresh 2019	N/A	Instant Hardware Replacement
Built in Hardware Refresh 2019	N/A	Move to Barracude Cloud backup
Under Warranty Extension	400	No Access to WIFI
Under Warranty Extension	400	No Access to WIFI
Under Warranty Extension	400	No Access to WIFI
Under Warranty Extension	400	No Access to WIFI
Under Warranty Extension	400	No Access to WIFI
Under Warranty Extension	400	No Access to WIFI
Under Warranty Extension	400	No Access to WIFI
Under Warranty Extension	400	No Access to WIFI

Likelihood of Failure	Core Function	Vendor	Maintenance Vendor	Model	Operating System	Annual Maintenance Cost after End Support
Low	Switch	CDW-G	CDW-G			500
Low	Switch	CDW-G	CDW-G			500
Low	Switch	CDW-G	CDW-G			500
Low	Switch	CDW-G	CDW-G			500
Low	Switch	CDW-G	CDW-G			500
Low	Switch	CDW-G	CDW-G			500
Low	Core Switch	CDW-G	CDW-G			500
Low	Core Switch	CDW-G	CDW-G			500
Low	Host Server for Virtual Machines	Dell	Dell		VMWARE	2,000
Low	Host Server for Virtual Machines	Dell	Dell		VMWARE	2,000
Low	Replication Array	Dell	Dell			600
Low	Replication Array	Dell	Dell			600
Low	Primary Storage Array	Dell	Dell			2,000
Low	Primary Storage Array	Dell	Dell			2,000
Low	File Level Backup/Restore	Quest	Dell			3,000
Low	File Level Backup/Restore	Quest	Dell			3,000
Low	File Level Backup/Restore	Quest	Dell			3,000
Low	File Level Backup/Restore	Quest	Dell			3,000
Low	Managed Firewall Service	Eatel	Eatel Business/Venyu			
Low	Managed Firewall Service	Eatel	Eatel Business/Venyu			
Low	Managed Router Service	Eatel	Eatel Business/Venyu			
Low	Managed Router Service	Eatel	Eatel Business/Venyu			
Low	Email Virus/Spam Filter	Barracuda	Barracuda			1,500
Low	Message Archiver	Barracuda	Barracuda			2,500
Low	Access Point	CDW-G	CDW-G			
Low	Access Point	CDW-G	CDW-G			
Low	Access Point	CDW-G	CDW-G			
Low	Access Point	CDW-G	CDW-G			
Low	Access Point	CDW-G	CDW-G			
Low	Access Point	CDW-G	CDW-G			
Low	Access Point	CDW-G	CDW-G			
Low	Access Point	CDW-G	CDW-G			

Agency	System Location	City	Building	Floor	Room	Rack	Core Count	Dedicated source of re	Replacement Priority
	Capitol Building	Baton Rouge							Medium
	Capitol Building	Baton Rouge							Medium
	Capitol Building	Baton Rouge							Medium
	Capitol Annex	Baton Rouge							Medium
	Capitol Annex	Baton Rouge							Medium
	Capitol Annex	Baton Rouge							Medium
	ISB	Baton Rouge							Medium
	ISB	Baton Rouge							Medium
	ISB	Baton Rouge							High
	ISB	Baton Rouge							High
	ISB	Baton Rouge							
	ISB	Baton Rouge							
	ISB	Baton Rouge							High
	ISB	Baton Rouge							High
	ISB	Baton Rouge							Medium
	ISB	Baton Rouge							Medium
	Capitol Building	Baton Rouge							Medium
	Capitol Building	Baton Rouge							Medium
	ISB	Baton Rouge							Low
	ISB	Baton Rouge							Low
	ISB	Baton Rouge							Low
	ISB	Baton Rouge							Low
	ISB	Baton Rouge							Low
	ISB	Baton Rouge							Low
		Baton Rouge							Low
		Baton Rouge							Low
		Baton Rouge							Low
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		Baton Rouge							Low
		Baton Rouge							Low
		Baton Rouge							Low
		Baton Rouge							Low
									Low

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APPENDIX 18: ELECTED OFFICALS – DEPARTMENT OF JUSTICE

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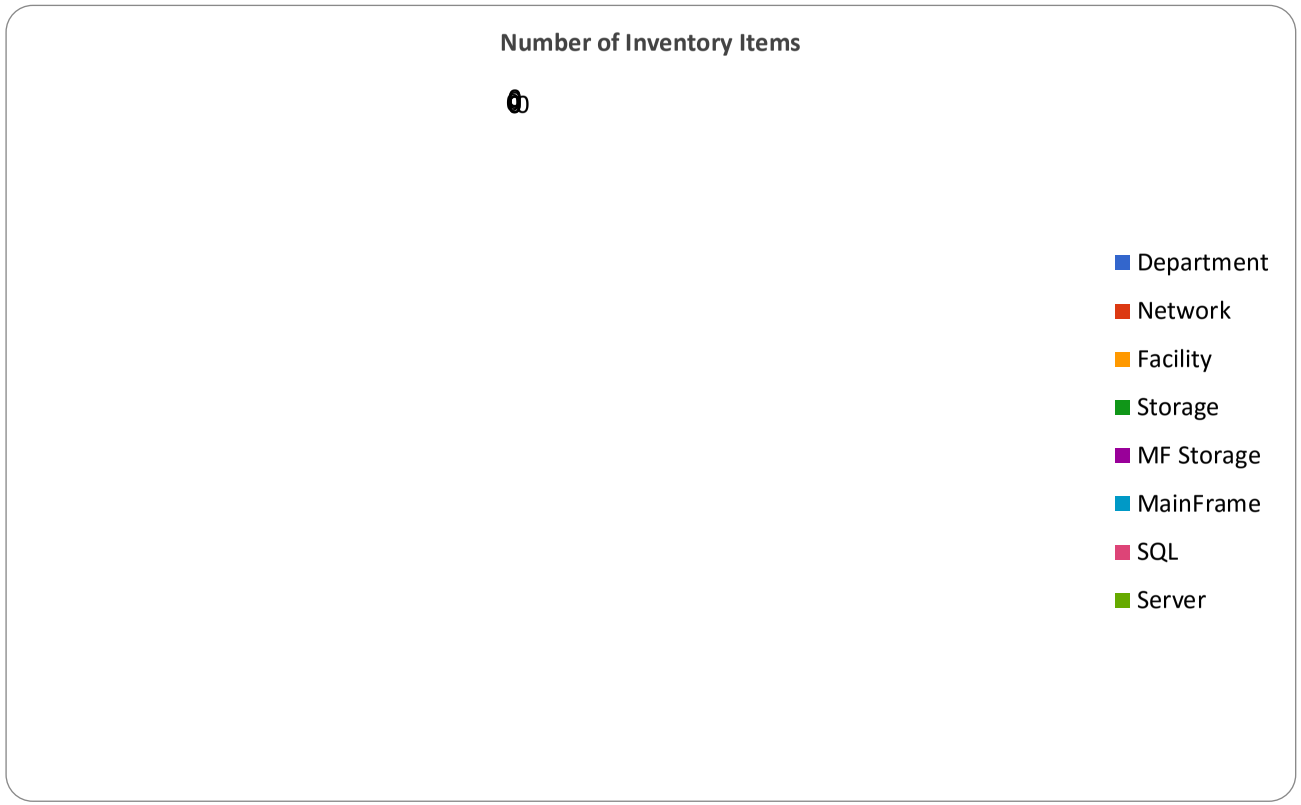
Department	Number of Inventory Items	Replacement Cost
Network	0	$ 19,900.00
Facility	0	$ -
Storage	0	$ 15,000.00
MF Storage	0	$ -
MainFrame	0	$ -
SQL	0	$ -
Server	0	$ 278,900.00
All HCR 121 Infrastructure Inventory	**0**	**$313,800.00**



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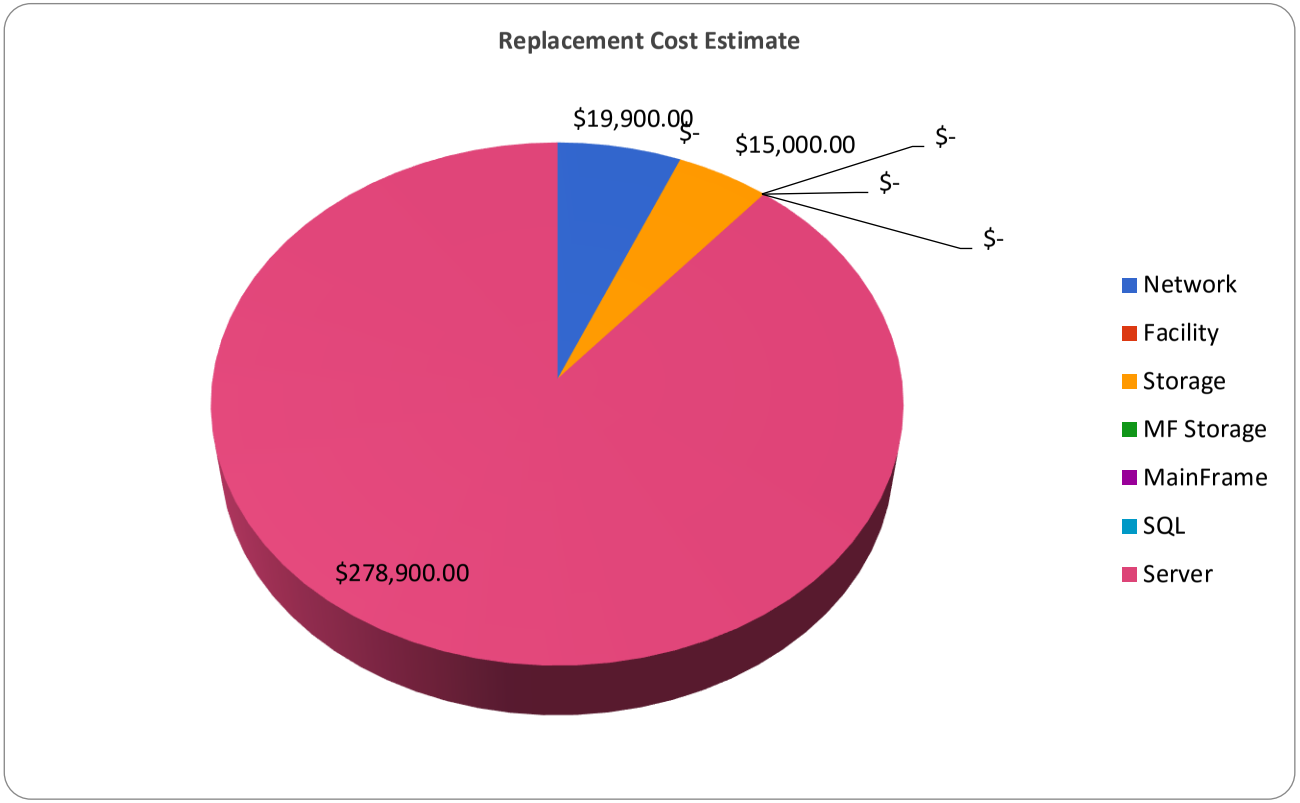
Replacement Cost Estimate
$19,900.00
$-
$15,000.00
$-
$-
$-
$278,900.00
Network
Facility
Storage
MF Storage
MainFrame
SQL
Server

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