

**Administrative and Supporting Services
110 - M2 - WK - IT SYSTEMS INFRASTRUCTURE**

Agency Submittal: 11-2017-19-YR Agency Req

Budget Period: 2017-19

SUMMARY

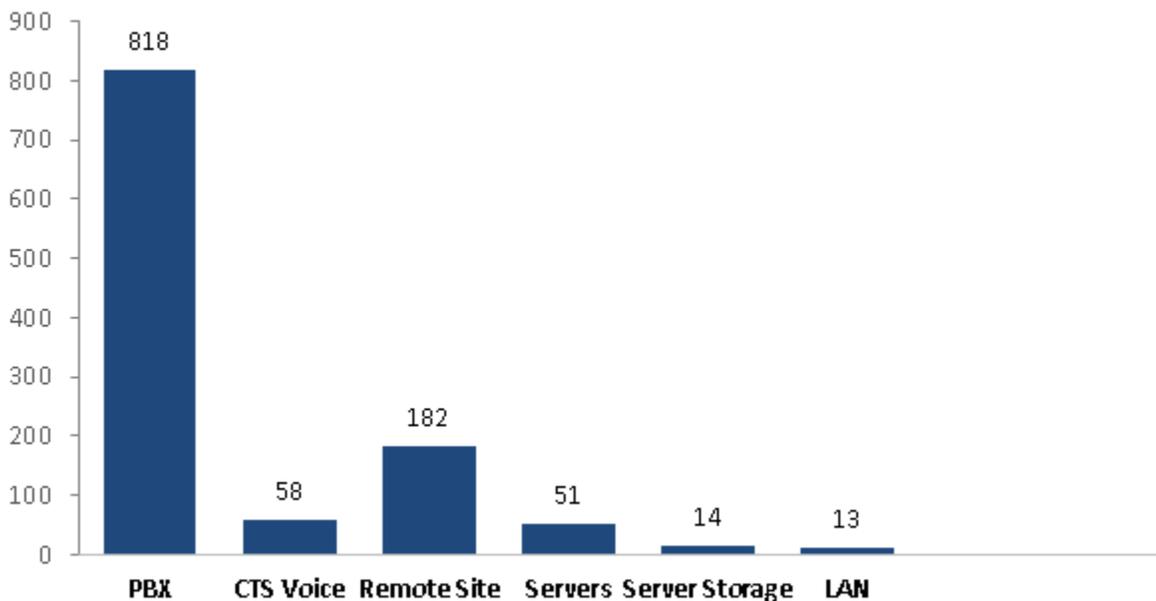
The condition of Department of Social and Health Services' (DSHS) information technology (IT) systems are reaching a critical state where service to clients is at risk. There have been no improvements over the last ten years to the DSHS IT infrastructure. To contain that risk and limit the impact on clients, DSHS requests \$45,305,000 Total Funds (\$30,656,000 GF-State) to update the IT infrastructure and limit the potential for system failure.

PROBLEM STATEMENT

There have been no improvements over the last ten years to the DSHS IT infrastructure. It is now critical to address improvements, as infrastructure appliances are at or past end-of-life, putting availability of mission critical systems supporting DSHS services, such as Automated Client Eligibility System (ACES), Social Service Payment System (SSPS), and FamLink, in immediate jeopardy. DSHS is at serious risk of fines due to a lack of compliance with federal guidelines and requirements on network encryption and segmentation, and data encryption at-rest and in-transit. The 99.9 percent up-time minimum (stated in service level agreement with WaTech) on wide area network (WAN) circuits is not being met due to current infrastructure limitations. Replacement parts for telephone handsets and telephone systems beyond end-of-life are very difficult to obtain. DSHS is forced to purchase used or refurbished parts at extremely high prices because these parts are no longer manufactured or available in inventory. DSHS is experiencing service outages as shown below:

IT Service Outages SFY 2015

Connectivity Distruptions



SOURCE: DSHS Enterprise Technology



DSHS VISION

People are healthy • People are safe • People are supported • Taxpayer resources are guarded

DSHS MISSION

To transform lives

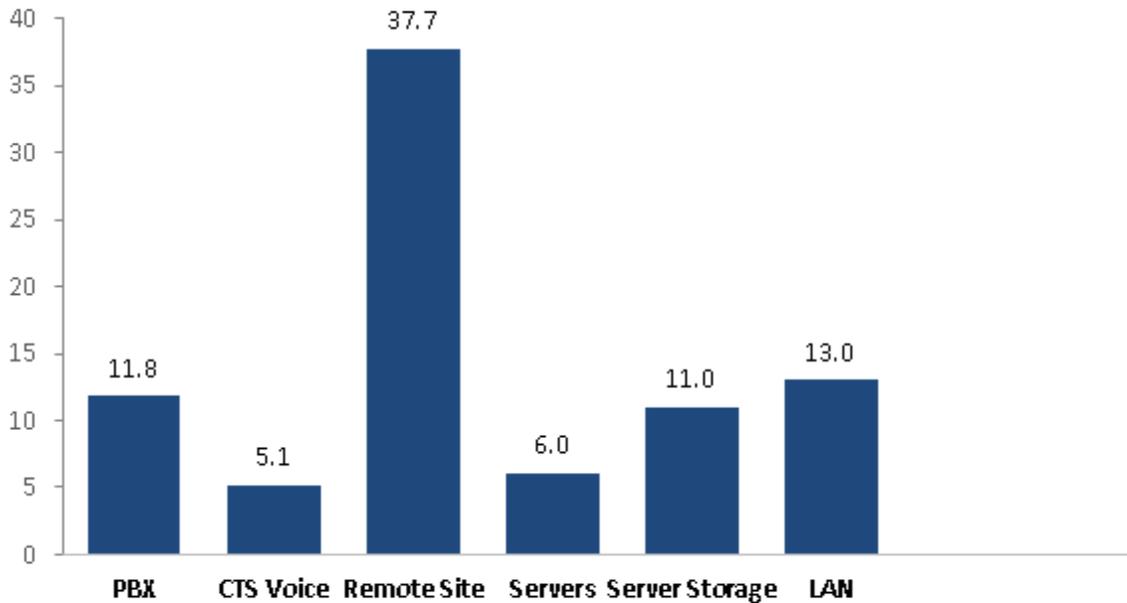
DSHS VALUES

Honesty and Integrity • Pursuit of Excellence • Open Communication • Diversity and Inclusion • Commitment to Service

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IT Service Outages SFY 2015

Average Days out of Service per Outage



SOURCE: DSHS Enterprise Technology

The days shown above are the average days out of service. For example, server storage connectivity was down an average of 11 days but in one incident a server was down for 112 days, and in another a local area network (LAN) was down for 102 days.

PROPOSED SOLUTION

This request funds the replacement of necessary equipment to meet the day-to-day needs of DSHS. Modernization of the DSHS agency-wide infrastructure will provide DSHS staff with the improved ability to serve more than 2.5 million Washington residents who rely on DSHS to provide behavioral health and developmental disability services, aging and long-term care, child and family support, juvenile rehabilitation, and food and cash assistance. This work allows DSHS to standardize infrastructure for much greater supportability, reliability and redundancy providing improved overall access by DSHS staff serving clients and by citizens/clients directly accessing Web services and information. The equipment will be financed primarily through the Office of the State Treasurer Lease/Purchase program on a four-year term.

EXPECTED RESULTS

The value to DSHS will be realized incrementally as implemented over the life of the project in the following areas:

- Security and reliability of systems and communications reliant on the DSHS network – helps DSHS meet security and risk compliance and regulatory requirements
- Consolidation of services for supportability and availability – standardization of voicemail and calling plans, and standardization of infrastructure to accommodate new technology including access to and support for future Cloud services
- IT agility for simplified operations through new standardized support models
- Future cost avoidance through replacement and bundling of dual circuits to provide redundancy
- Improved infrastructure will allow quicker responses between end-users and applications accessed via the WAN for performance speeds that are similar to accessing LAN.

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- Unified communications capability sets the foundation for improved voice and video services.

If this request is not adopted, clients who are eligible for services could be delayed in receiving them. An improved IT infrastructure could create efficiencies and reduce backlogs.

STAKEHOLDER IMPACT

There is no known stakeholder opposition. Stakeholders will appreciate the goal of providing services to clients uninterrupted by IT service outages. It is essential that functional and reliable equipment be provided to DSHS employees for use in accomplishing assigned tasks.

Agency Contact: Ken Brown, (360) 902-7583

Program Contact: Marie Finn, (360) 902-7635

OTHER CONNECTIONS

Performance Outcomes/Important Connections

1. Does this DP provide essential support to one or more of the Governor's Results Washington priorities?

Goal 4: Healthy & Safe Communities - Healthy People - Provide access to good medical care to improve people's lives.

Goal 5: Efficient, Effective & Accountable Government - Customer Satisfaction and Confidence - 1.1 Increase customer services.

2. The decision package meets the following DSHS' strategic objectives:

[110] ET and RDA 5.9: Protect sensitive client data.

[110] ET/TSD 5.14: Pursue excellence in the technology services we offer.

3. Identify other important connections or impacts below. (Indicate 'Yes' or 'No'. If 'Yes' identify the connections or impacts related to the proposal.)

a) Regional/County impacts? No

b) Other local government impacts? No

c) Tribal government impacts? No

d) Other state agency impacts? No

e) Responds to specific task force, report, mandate or executive order? Yes

f) Does request contain a compensation change or require changes to a Collective Bargaining Agreement? No

g) Facility/workplace needs or impacts? Yes

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- h) Capital budget impacts? Yes
- i) Is change required to existing statutes, rules or contracts? Yes
- j) Is the request related to litigation? No
- k) Is the request related to Puget Sound recovery? No
- l) Other important connections? None

4. Please provide a detailed discussion of connections/impacts identified above.

- Currently DSHS has security/compliance audits from the State Auditor, Office of Civil Rights, Internal Revenue Service, and others. These audits have security compliance findings that DSHS must address to mitigate the findings.
- Replacing wiring and improving connectivity to power, cooling and ventilation systems.
- Switching from a capital expense to an operating expense.
- This effort will create new service contracts.

Alternatives/Consequences/Other

5. What alternatives were explored by the agency, and why was this alternative chosen?

The alternative would be to do nothing which would endanger IT support to the programs serving clients. Lack of funding will stop this project from moving forward.

- The DSHS infrastructure is reaching a critical state due to end-of-life appliances and systems. If this project is put on hold the risk of service outages and irreparable appliances and systems goes up exponentially.
- DSHS will be unable to meet current and future growth issues, including, but not limited to, increased bandwidth needs, and computing power requirements and security and risk compliance issues that our current state of technology cannot protect us from.
- The ability for DSHS to implement Cloud First initiatives will be impacted.

6. How has or can the agency address the issue or need within its current appropriation level?

DSHS has not been able to upgrade the IT infrastructure in the last ten years. The scope of need at this point is well beyond the DSHS funded level.

7. Does this decision package include funding for any IT-related costs (hardware, software, services, cloud-based services, contracts or IT staff)?

- No
- Yes (Include an IT Addendum)

Fiscal Detail**110 - M2 - WK - IT Systems Infrastructure**

Operating Expenditures	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
001-1 General Fund-State	15,062,000	15,594,000	19,679,000	19,147,000
001-C General Fund-Medicaid	7,197,000	7,452,000	9,405,000	9,149,000
Total Cost	22,259,000	23,046,000	29,084,000	28,296,000
Staffing	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
FTEs	0.0	0.0	0.0	0.0

Performance Measure Detail

Activity:	Incremental Changes			
	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
Program: 110				
K001 Administration and Supporting Services	0	0	0	0
No measures submitted for package				

Object Detail

	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
EL Data Processing Services (Interagency)	0	787,000	6,825,000	6,037,000
P Debt Service	22,259,000	22,259,000	22,259,000	22,259,000
Total Objects	22,259,000	23,046,000	29,084,000	28,296,000

DSHS Source Detail**Overall Funding**

Operating Expenditures	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
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Fund 001-1, General Fund-State**Sources Title**

0011 General Fund State	15,062,000	15,594,000	19,679,000	19,147,000
Total for Fund 001-1	15,062,000	15,594,000	19,679,000	19,147,000

Fund 001-C, General Fund-Medicaid**Sources Title**

19UL Title XIX Admin (50%)	7,197,000	7,452,000	9,405,000	9,149,000
Total for Fund 001-C	7,197,000	7,452,000	9,405,000	9,149,000
Total Overall Funding	22,259,000	23,046,000	29,084,000	28,296,000

Information Technology Addendum

Recsum Code and Title 110-M2-WK-IT Systems Infrastructure

Part 1: Itemized IT Costs

Please itemize any IT-related costs, including hardware, software, services (including cloud-based services), contracts (including professional services, quality assurance, and independent verification and validation) or IT staff. Be as specific as you can. (See Chapter 12.1 of the OFM Operating Budget Instructions for guidance on what counts as “IT-related costs.”)

Information Technology Items in this DP (insert rows as required)	FY 2018	FY 2019	FY 2020	FY 2021
Router (ISR4451) (Includes L3 Switch/UCS/FW) (\$29,000 per unit over life of 48 mo lease)	\$1,162,000	\$1,162,000	\$1,162,000	\$1,162,000
Firewall (PA 7050) (\$227,900 per unit over life of 56 mo lease)	\$236,000	\$236,000	\$236,000	\$236,000
Data center switching (NX 9K) N9K-C9372PX Switch	\$404,906	\$404,906	\$404,906	\$404,906
Data center switching (NX 9K) N9K-C9372PX Port (require 48 ports per switch)	\$744,656	\$744,656	\$744,656	\$744,656
Data center switching (NX 9K) N9K-C9336PQ Switch	\$413,698	\$413,698	\$413,698	\$413,698
Data center switching (NX 9K) N9K-C9336PQ Port (require 32 ports per switch)	\$82,740	\$82,740	\$82,740	\$82,740

2017-19 Biennial Budget
Department of Social and Health Services

WAN (CTL Circuits, dual honed, 2 per site)	\$10,278,000	\$10,278,000	\$10,278,000	\$10,278,000
LAN Switching (MS350-48-LP)	\$1,915,625	\$1,915,625	\$1,915,625	\$1,915,625
LAN WIFI	\$568,742	\$568,742	\$568,742	\$568,742
VOIP (UCS, 8841)	\$6,452,633	\$6,452,633	\$6,452,633	\$6,452,633
Remote Site Enterprise Server	\$0	\$787,000	\$1,575,000	\$787,000
Datacenter Server Infrastructure for SDC and QDC for a fully populated UCS-B rackManaged Service (Not on COP)	\$0	\$0	\$4,000,000	\$4,000,000
WaTech Monthly Rack charge (Not on COP)	\$0	\$0	\$1,250,000	\$1,250,000
Total Cost	\$22,259,000	\$23,046,000	\$29,084,000	\$28,296,000

Part 2: Identify IT Projects

1. Does this decision package fund the development or acquisition of a new or enhanced software or hardware system or service? (Answer Yes or No)

Yes

2. Does this decision package fund the acquisition or enhancements of any agency data centers? (See OCIO Policy 184 for definition.) (Answer Yes or No)

No

3. Does this decision package fund the continuation of a project that is, or will be, under OCIO oversight? (See OCIO Policy 121.) (Answer Yes or No)

Yes

If you answered “yes” to any of these questions, you must complete a concept review with the OCIO before submitting your budget request. Refer to Chapter 12.2 of the Operating Budget Instructions for more information.