Sauk County, Wisconsin

Management Information Systems Annual Report

2017 Highlights:

System security / availability / usability: In response to the ever-increasing threat of bad actors seeking to exploit system and user vulnerabilities, MIS has worked to shore up our defenses without adversely affecting user experience or system availability. The past year has seen updates to Sauk County's perimeter security, tools to improve network visibility, the implementation of automated security logging and the roll out of local PC drive encryption. During this same time, Helpdesk calls for issues related to such changes have decreased as system outages continued to be a rare occurrence.

2017 Goals Review

2017 GOALS REVIEW

OBJECTIVE	WAS THIS OBJECTIVE REACHED IN 2017?	
	Yes or No (If no, please	
	provide comment)	
Implement network redundancy	No – systems purchased –	
	waiting on the electrical wiring	
	project at the LEC	
Implement system redundancy for key systems	No – system redundancy is	
	dependent on the implementation	
	of the above network redundancy	
Improve infrastructure at offsite facilities	Yes	
 Regularly test failover and recovery 	No – dependent on 1 & 2 above	
Develop support alternatives to Helpdesk	No – working on a support	
	forum for future implementation	
6. Improve problem resolution times	Yes	
7. Improve communication and feedback	Yes	
8. Improve Helpdesk effectiveness	Yes	
Implement monitoring dashboards (systems)	Yes	
10. Improve desktop deployment strategy	No – yet to find a better solution	
11. Revise: Policy, Standards, Replacement Cycles as	Yes	
necessary		
12. Improve website use	Yes	
13. Improve utilization of existing system resources	Yes	
14. Improve utilization of collaboration tools	Yes	
15. Improve disk encryption options	Yes	
16. Improve password management	No – has not been a priority of	
	this administration	

2017 GOALS REVIEW

OBJECTIVE	WAS THIS OBJECTIVE REACHED IN 2017?	
	Yes or No (If no, please provide comment)	
17. Enhance mobile functionality	Yes	
18. City of Baraboo support	Yes	
19. Upgrade email to Exchange Online	No – in process but not complete	
20. Develop internal quality measures based on feedback from departmental clients	No – collecting feedback but no action has been taken to date	

Changes / Accomplishments:

<u>Security Risk Assessment:</u> In the fall of 2017, in collaboration with Heartland Business Systems, MIS facilitated a HIPPA security risk assessment to evaluate the County's security posture with regard to the HIPPA security rules. The final findings and attestation letter were delivered in November. Of 73 security elements evaluated, Sauk County had completed or was in compliance with 60. The thirteen requiring attention are considered to be low and medium risk and will be addressed in 2018.

Acquisition of Co-Data Center Hardware: MIS is in the process of implementing a secondary data center at the Law Enforcement Center (LEC). This co-data center will run in tandem with the current data center, each acting as a fail-over backup for the other. Once implemented, these tandem data centers will provide continuous system availability given one or the other is online. To date all hardware has been purchased and the network facilities have been installed. Pending the installation of upgraded electrical facilities at the LEC, these systems should be implemented in the spring of 2018.

<u>eMail Migration:</u> Beginning in 2016, MIS embarked upon the process of migrating all email system users from Lotus Notes / Domino to Microsoft Exchange Online and Outlook. During 2017, most email users were migrated with those remaining planned for early 2018. Exchange online and Microsoft Outlook provide enhanced capabilities and ease of access from any computer with an internet connection, allowing for improved mobility.

<u>Windows 10 Desktop Deployment:</u> In an effort to keep pace with changing desktop computing technology, MIS began installing Windows 10 on most new computers installed in 2017. Windows 10 provides better desktop performance and is to be the last operating system released by Microsoft. If this remains true, painful operating system upgrade will be a thing of the past.

GIS Data Collection and Provision: In 2017, GIS staff focused on improving the quality of our base data and staying current with Parcel splits. For the first time ever, splits are recorded and converted as they are processed through the various systems within the county. Both servers and

client machines have been upgraded to take advantage of some of the latest technology, such as the Parcel Drafter that is utilized by the Treasurer's staff and the Public Notification, which creates mailing labels on the fly for CPZ. Through collaboration with the local communities, the Site Address Notification App has been deployed to keep the E911 system current with new addresses. Through this effort, all address units have been captured for apartments, condominiums, trailer parks, and suites.

MIS Online Knowledge Center: Over the past several years, MIS has worked to create a departmental intranet web site dedicated to the documentation of departmental knowledge. This website, dubbed MISNet, is a repository for system configurations and procedures. The intent of this is to promote cross training and support succession planning.

Statistical Summary:

The graphs on the following pages detail additional service related statistics for departmental operations. All service statistics were derived from the MIS Department's Helpdesk management system. Financial statistics were derived from Sauk County's accounting system and based on data from the "MIS Chargeback" accounts for each department.

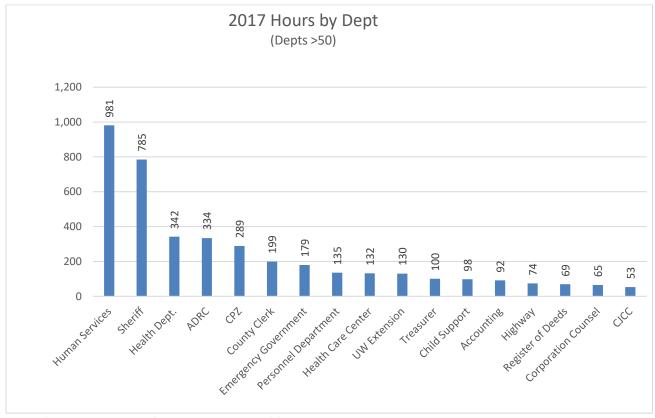


Figure 1 - MIS Service Hours by Dept. (Depts. over 50 hrs.)

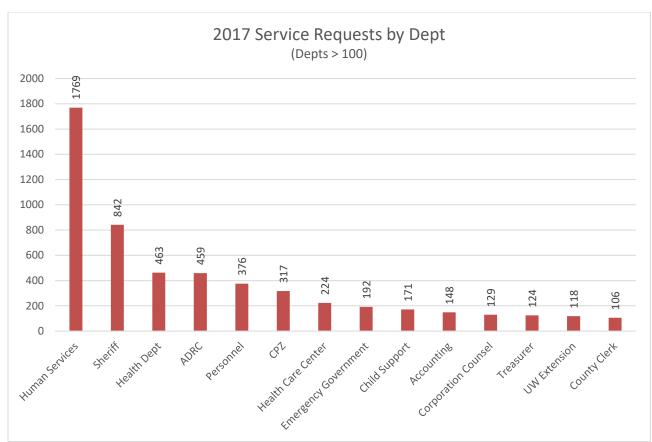


Figure 2 - MIS Requests for Service by Dept. (Depts. over 100)

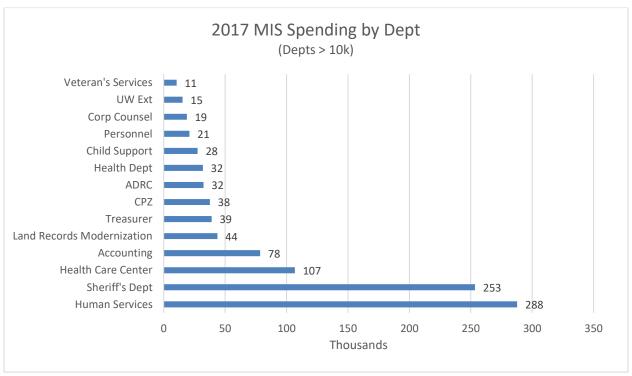


Figure 3 - MIS Spending by Dept. (Depts. over \$10,000)

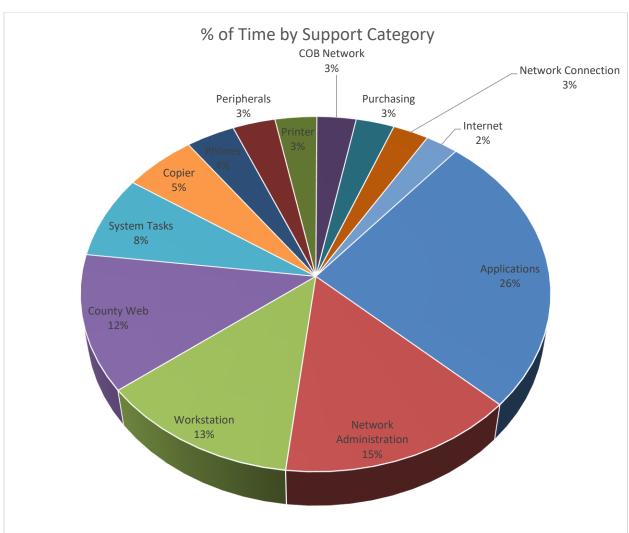


Figure 4 - Percent of Total MIS Hours by Support Category

OUTPUT MEASURES

DESCRIPTION	2015 ACTUAL	2016 ACTUAL	2017 ACTUAL
Help Call Volume	8,646	7,692	7,687
Help Call Hours	5,652	6,156	6,110
Projects Opened	991	1,512	1,641
Projects Closed	865	1,500	1,738
Project Hours Total	2,398	2,570	2,319
GIS Requests for Service	258	225	190
GIS Project Hours	1,199	1,458	1,249
Ext Support Hrs.	260	264	355
Planned System Downtime (hr.)	35	38	32
Consulting Expenditures	96,114	157,494	69,737
Total IT Expenditure	1,330,765	1,309,300	1,486,660
Unit Replacements	325	304	215

OUTCOME AND EFFICIENCY MEASURES

DESCRIPTION	2015 ACTUAL	2016 ACTUAL	2017 ACTUAL
Critical Unplanned Downtime (in hours)	0	0	2
Non-Critical Unplanned Downtime (in hours)	66	0	14.5
Average hours per help call	.65	.8	.8
Project Closed / Projects in Queue	23%	37%	45%