Sauk County, Wisconsin Management Information Systems Annual Report

2018 Highlights:

Implementation of AI Managed Endpoint Protection: In 2018, MIS transitioned all of Sauk County's computer end points from a legacy, application based virus and malware protection to a state-of-the-art, cloud based solution that uses big data and predictive analytics to manage and fend off malware. This system, Carbon Black Defense, uses AI technology to provide real-time analysis of all endpoint activity and automatically thwart attempts to download, install or run potentially malicious code.

Law Enforcement System Selection: In cooperation with key staff from the Sheriff's Department, MIS facilitated a selection process for the purchase of a new law enforcement system. The new system will replace the current TriTech Visionair System used by the Sheriff's Department. System implementation will begin in early 2019 with a tentative go-live target of the end of the year.

2018 Goals Review

	OBJECTIVE	WAS THIS OBJECTIVE REACHED IN 2018?				
		Yes or No (If no, please provide				
		comment)				
1.	Improve Disaster Recovery and Business Continuity	No - all hardware is in place				
	through the implementation of redundant infrastructure	awaiting reinstall of UPS				
2.	Develop continuity plans for key systems and operations	No - Plan is in process				
3.	Improve end user security compliance	Yes				
4.	Improve Security Technologies	Yes				
5.	Improve end user support	Yes				
6.	Maintain system replacement cycles	Yes				
7.	Improve utilization of technology	Yes				
8.	Reduce impact of security measures on end user productivity	Yes				
9.	Implement monitoring systems to enhance support capabilities	Yes				
10.	Reduce the number of reportable security incidents	No - by virtue of raising the awareness of incident reporting, we have actually seen an increase in reported incidents.				
11.	Fulfill Departmental Requests	Yes				

2018 GOALS REVIEW

Changes / Accomplishments:

<u>Completion of the Exchange Online eMail Implementation:</u> In early 2018, the email system upgrade was completed. All Sauk County email System users now have access to email from any location with an internet connection via Microsoft's cloud services. The new system also provides improved security and mail management features.

<u>MUNIS SaaS (Software as a Service) Implementation:</u> In October of 2018, Sauk County's Accounting System, MUNIS, was transitioned from an on premise single server application to a vendor hosted, cloud solution. This transition, which was a joint effort of the Accounting and MIS Departments, provides the County with greater flexibility for system access as well as enhanced security and business continuity capabilities.

<u>Core Network Switch Hardware Replacement:</u> As part of an ongoing infrastructure maintenance initiative, MIS staff replaced the core network switch and related switching hardware at key network junction points within county facilities. In addition to improving network speed and throughput, these upgraded components also provide the capability to encrypt data being transferred over the County's private network. Future upgrades will include primary network switches at remote facilities.

<u>CJIS and IRS System Security Audits:</u> During 2018, Sauk County underwent two significant system security audits. The first was an audit of the secure network facilities at the Law Enforcement Center by the FBI's Criminal Justice Information Services Division. The second audit was an IRS audit of the Child Support Department's information system practices. While the final results of both have not yet been published, preliminary findings of both audits indicate that no substantial issues were identified.

<u>Local Update of Census Address Project (LUCA)</u>: In 2018, GIS staff participated in the federal government's LUCA program. This involved reviewing and updating address information used for the decennial US census. Participation in the program helps Sauk County ensure an accurate census count, which is used by the federal government when allocating over \$675 billion in federal funding to state and local government.

<u>Development of a Flood Damage Assessment Application:</u> At the request of Sauk County Emergency Management, GIS staff developed and implemented an application to collect damage assessment data, resulting from the Fall 2018 flooding within the County. This data is used to create damage severity maps that FEMA uses when evaluating flood damage costs, which in turn is used to determine funding eligibility.

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.

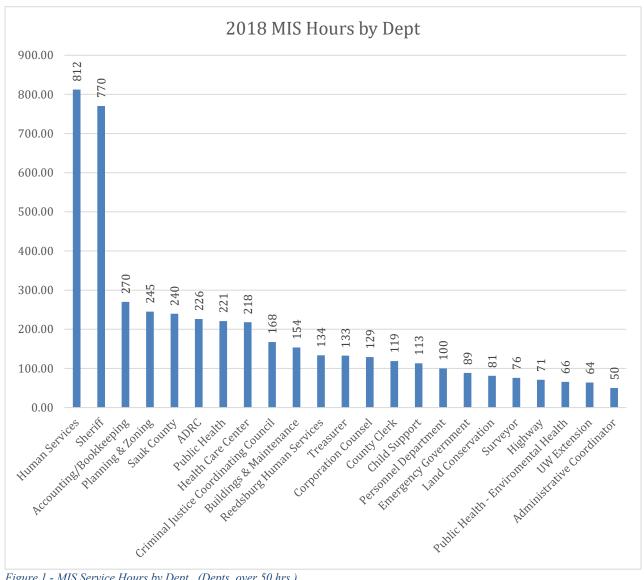


Figure 1 - MIS Service Hours by Dept. (Depts. over 50 hrs.)

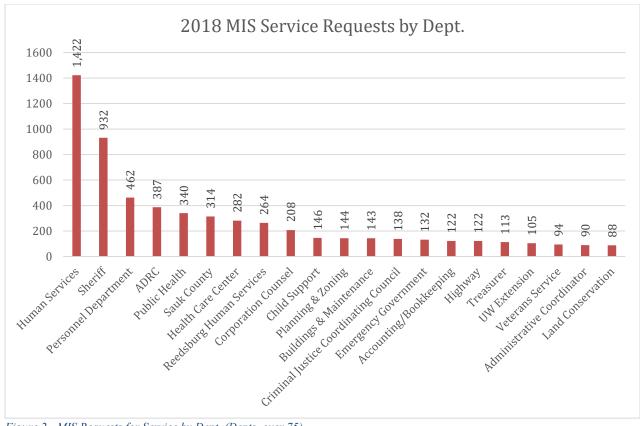


Figure 2 - MIS Requests for Service by Dept. (Depts. over 75)

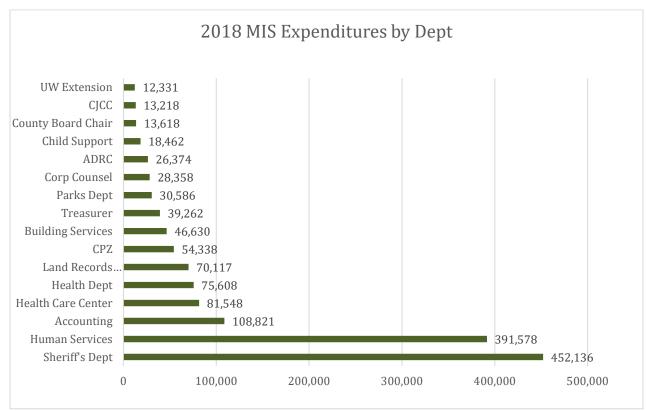


Figure 3 - MIS Spending by Dept. (Depts. over \$10,000)

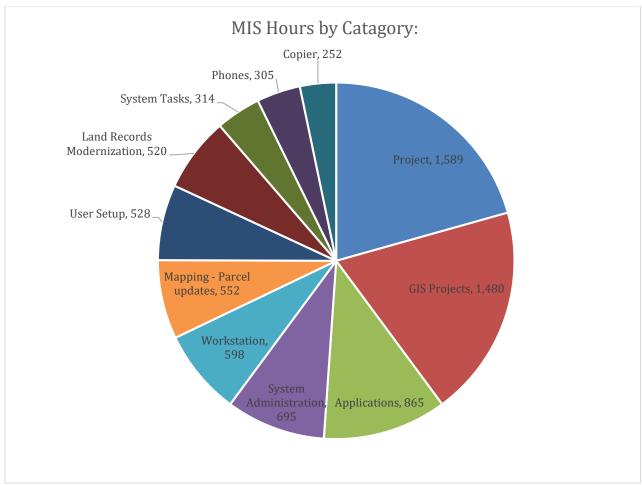


Figure 4 – Hours by support category (Categories over 200 hrs.)

OUTPUT MEASURES

DESCRIPTION	2016 ACTUAL	2017 ACTUAL	2018 ACTUAL
Help Call Volume	7,692	7,687	9,792
Help Call Hours	6,156	6,110	6,790
Projects Opened	1,512	1,641	1,820
Projects Closed	1,500	1,738	1,927
Project Hours Total	2,570	2,319	2,422
GIS Requests for Service	225	190	181
GIS Project Hours	1,458	1,249	1,855
Ext Support Hrs.	264	355	327
Planned System Downtime (hr.)	38	32	67
Consulting Expenditures	157,494	69,737	118,748
Total IT Expenditure	1,309,300	1,486,660	2,076,718
Unit Replacements	304	215	288

DESCRIPTION	2016 ACTUAL	2017 ACTUAL	2018 ACTUAL
Critical Unplanned Downtime (in hours)	0	2	.85
Non-Critical Unplanned Downtime (in hours)	0	14.5	32
Average hours per help call	.8	.8	.7
Project Closed / Projects in Queue	37%	45%	80%

OUTCOME AND EFFICIENCY MEASURES