January 28, 2020

Honorable Members of the Sheboygan County Board and County Administrator Adam Payne,

I am pleased to submit the 2019 Annual Report for the Sheboygan County Information Technology (IT) Department.

In 2019, the IT Department completed a number of projects and initiatives that enhance information security and improve communication and collaboration within the organization. At the same time, Sheboygan County IT supported nearly all County departments by providing technical expertise and project management oversight for several system upgrades and implementations. Lastly, and perhaps most importantly, Information Technology continued to provide a 24-by-7 Service Desk, ensuring that critical County operations and systems continue to function around the clock.

Noteworthy projects in 2019 included the launch of the County's redesigned website, upgrade of County computers to the Windows 10 operating system, and technical leadership for the County's new Finance/HR software system project. 2020 will be a very busy year with the refresh of the County's server and storage environment, a Microsoft Office upgrade, the replacement of Rocky Knoll's entire network infrastructure, the implementation of a Security Information and Event Management system and the expansion of the Ring of Fiber to connect the County's facilities in the western reaches of the County.

I am very proud of the services the Information Technology team has delivered in the last year, solid work that could not be done without the continued guidance and support of the County Administrator, Finance Committee and County Board.

Respectfully Submitted,

Christopher S. Lewinski

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Mission Statement and Summary of Responsibilities

The mission of the Information Technology Department is to effectively and efficiently safeguard and account for the County's technological resources and to provide information technology service in support of all County departments.

The Information Technology (IT) Department provides assistance to County departments with a 24-hour help desk, and provides planning, management, and implementation services for the County's IT projects, systems, networks, and devices.

Goals and Objectives Achieved in 2019

- Redesigned the County's website to improve accessibility and American Disabilities Act (ADA) compliance, as well to enhance usability for website visitors. Provided technical oversight for the County's Finance/HR software system project.
- Upgraded County computers to the Microsoft Windows 10 operating system prior to the end of support for the Windows 7 system in January 2020.
- Conducted multiple in-person training sessions for County employees on the use of Gmail, Google Calendar, Contacts and Tasks.
- Provided ongoing cyber security awareness training and phishing email simulations for all County employees to improve the County's cyber security posture.
- Maintained an annual network uptime of 99.988%

Budget

	2019 Budget	2019 Results	Variance
Revenues	$2,224,767	$2,176,685	-$48,082
Expenses	$2,336,391	$2,157,874	$178,517

Overall, the IT Department had a positive variance of $130,435 for 2019, not including depreciation that is not budgeted.

$477,491 of Information Technology retained earnings was used for the purchase of new data center server and storage infrastructure ($416,237) and the relocation of the Ring of Fiber underneath the Sheboygan River ($61,254), in support of the Pennsylvania Avenue bridge reconstruction project.

The IT Department was successful in achieving the 2020 budget target. Overall, the department had a 3.7% increase in the budgeted IT allocation from 2019 to 2020, primarily due to rising support contract costs.

Issues and Challenges Ahead

A number of challenging issues face the County's Information Technology Department for the foreseeable future.

- **Security of the County's data and network assets.** Cyber threats become more numerous and sophisticated each day, particularly in the local government sector, and Sheboygan County is not immune to these threats. While educating end users on threat detection and avoidance is the County's single most effective cyber security strategy, it is also the most difficult to achieve with nearly 800 employees of varying levels of computer proficiency. Additionally, IT is continually tasked with balancing strong security practices and policies with employee experience and convenience, as the two (security and convenience) are often inversely related.

- **Trend in support contract pricing models.** In addition to the rising costs of maintenance and support contracts for the County's hardware and software systems (averaging a 4% annual increase, depending upon the system), more vendors are adopting a subscription or service-based pricing model, replacing the dated perpetual license model. This is problematic for the County, because these costs, under current accounting practices, may not be capitalized and must be added to the County's operational budget. Industry trends suggest this will become commonplace in the years ahead.

- **IT talent shortage.** Sheboygan County has a very strong and dedicated IT team, with many employees having 15 or more years' experience. However, as those seasoned professionals retire or move on to more senior level positions elsewhere, finding qualified workers in an extremely in-demand field will be increasingly difficult or impossible without ongoing efforts and innovative practices to recruit, reward and retain talent.

Goals and Objectives for 2020

- Extend the reach of the Ring of Fiber to include the Rocky Knoll Health Care Center, Transportation Complex and Sheboygan Airport through the use of a public/private partnership.

- Replace all of Rocky Knoll Health Care Center's aged network infrastructure.

- Replace the County's server and storage infrastructure in its primary and disaster recovery data centers.

- Implement security software to improve monitoring and notifications of network security incidents.

- Implement software to ease administration and improve security of the County's mobile devices and smartphones.

- Upgrade all County computers to Microsoft Office 2019.