



Ottawa County  
*Where You Belong.*



# Ottawa County Technology Plan

2018 Update

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OTTAWA COUNTY, MICHIGAN

# Ottawa County

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## County Technology Plan Update 2018

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2018

## DOCUMENT ACCEPTANCE and RELEASE NOTICE

This is the 2018 update to the core plan published in **2017 County Technology Plan**.

The County Technology Plan is a managed document. This document is authorized for release after all signatures have been obtained.

Please submit all requests for changes to the owner/author of this document.

<b>Table of Changes to County of Ottawa 2017 Technology Plan</b>	
Mission	Updated Mission Statement and Mission analysis
Goals and Strategies	Strategies reviewed and updated. Refer to Section 2.2 of the 2017 County Technology Plan: Goal Enabling Strategies for the original strategies. These are guidelines for achieving the defined department goals.
SWOT-T	SWOT-T Analysis updated to reflect new capabilities and changes in environment both internal and external.
CIP 2018	Updated IT Related CIP Items 2019 - 2024+



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**Mission:** The Ottawa County Innovation & Technology Department partners with its customers to provide technical leadership, support goals and create cost effective solutions on a daily basis with an eye to the future that enable delivery of excellent service.

## **Mission Analysis: Who, What, Why, When and Where of County Technology**

**Who** Accomplishes: Innovation & Technology, Customers

**What** is Accomplished: technical leadership, create cost effective solutions

**Why** the Mission is Important: support goals, enable delivery of excellent service

**When** describes the Time Frame for Execution: on a daily basis with an eye to the future

**Where** is the Effort Focused: Ottawa County.

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## Department Goals: Strategy Changes Made to 2017 Goals

Goal 1: Fiscal Responsibility	Goal 2: Operational Stability
<p>Provide accurate cost estimating on equipment and projects prior to execution.</p> <p>Leverage existing resources to support new customers and services.</p> <p>Change Strategy 3: Projects require thorough cost estimating and option review with a financial management plan that includes regular reviews and change management procedures.</p> <p>Evaluate, review and adjust partnership and non-County customer fees.</p>	<p>Develop a consistent process for evaluating our security posture and enhancing it. Replaces Strategy 4. CYSAFE (CISOaaS) serves as the foundation and for regular review and enhancements.</p> <p>Move Strategy 7 to Customer Service. Make it refer to all IT products and services, not just GIS.</p> <p>Change Strategy 9: IT Training Services vs Computer Software, remove County employee reference. Convenience and variety of methods are a Customer Satisfaction strategy. Operational Stability refers to a highly skilled work force. "Deliver IT Training that is targeted to the needs of the organization which increases end user skills and self-sufficiency."</p> <p>Establish connections and relationships with private and public entities to discover and explore potentially valuable technologies, processes, knowledge, and ideas. (Operation Star Trek)</p>
Goal 3: Customer Service	Goal 4: Innovation
<p>New: Tailor communication to our audience. Understanding of what to communicate, method of how to communicate, how much to communicate, and the impact of our communication. Keep the communication professional and unemotional. Opinions are not judgments. Per six hats.</p> <p>New: Communicate to all involved and interested parties. Better use of communication plans and tools: RACI, etc.</p> <p>New: When your first response is "NO" reconsider options and discuss with user and seek team input.</p>	<p>Change Strategy 1: Enhance our ECM capabilities to increase efficiency and reduce reliance on paper.</p> <p>Strategy 3: No longer relevant.</p> <p>Replace Strategy 4: To avoid obsolescence through planning and exploring various alternatives. Remove Strategy 12 which is redundant.</p> <p>New: To incorporate innovation tools, and Lean thinking to guide and influence the development of ideas and solutions.</p> <p>New: Applying the Hedgehog and Flywheel concept to deliver breakthrough solutions. Disciplined behavior. Steady, structured, focused, consistent,</p> <p>New: Let others (non-IT) lead innovation and define our role in that effort.</p> <p>Strategy 11: No longer considered innovative. Normal part of expected technology.</p>

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## Department Goal Strategies 2018

<p><b>Goal 1: Fiscal Responsibility</b></p> <p>To proactively advance the County’s cost effective use of technology by developing and executing short-term, mid-term and long-term plans.</p> <p><b>Strategy 1:</b> To participate in and facilitate department and enterprise technology planning and decision making.</p> <p><b>Strategy 2:</b> Conduct annual Department, Team and Individual goal setting to define and align investments of money and effort, and to establish a basis for evaluating results over the next year.</p> <p><b>Strategy 3:</b> Provide accurate cost estimating on equipment and projects prior to execution</p> <p><b>Strategy 4:</b> Projects require thorough cost estimating and option review with a financial management plan that includes regular reviews and change management procedures.</p> <p><b>Strategy 5:</b> Avoid obsolescence, manage maintenance costs, and ensure reliable operations through consistent scheduled replacement of hardware and software.</p> <p><b>Strategy 6:</b> To continually interact with departments to understand their needs and identify opportunities for investing in beneficial technology.</p> <p><b>Strategy 7:</b> To engage County leaders through a Technology Advisory Group meeting quarterly to discuss issues and obtain input.</p> <p><b>Strategy 8:</b> To guide the County’s technology investment by maintaining a future technology plan that supports County goals, identifies key issues, major initiatives and cost estimates based on a continuous process of information gathering, analysis, evaluation and prioritization.</p> <p><b>Strategy 9:</b> Leverage existing resources to support new customers and services.</p> <p><b>Strategy 10:</b> Evaluate, review and adjust partnership and non-County customer fees.</p> <p><b>Strategy 11:</b> To communicate the Technology Plan to County Elected Officials and Department Heads, monitor its progress and use it as a source for ongoing dialogue regarding County IT investments.</p> <p><b>Strategy 12:</b> To increase awareness of GIS products and capabilities through direct interaction with partners, potential partners and County departments, published materials and formal presentations.</p>	<p><b>Goal 2: Operational Stability</b></p> <p>To maintain a stable and robust technology ecosystem through a holistic approach involving policy, people, process and technology.</p> <p><b>Strategy 1:</b> To develop appropriate and practical policies that are reviewed and updated at least biannually.</p> <p><b>Strategy 2:</b> To maintain existing systems through maintenance contracts and vendor provided upgrades.</p> <p><b>Strategy 3:</b> To invest in proven technology based on cost justified requirements.</p> <p><b>Strategy 4:</b> Develop a consistent process for evaluating our security posture and enhancing it. CYSAFE (CISOaaS) serves as the foundation and for regular review and enhancements.</p> <p><b>Strategy 5:</b> To continually evaluate and enhance the County’s Business Continuity and Disaster Recovery capability.</p> <p><b>Strategy 6:</b> To evaluate new technology and technical services in a systematic way and adapt those capabilities which shows a high potential for success in terms of acceptance and Return On Investment (ROI).</p> <p><b>Strategy 7:</b> To increase awareness of IT policies, products and capabilities.</p> <p><b>Strategy 8:</b> IT Training Services vs Computer Software, remove County employee reference. Convenience and variety of methods are a Customer Satisfaction strategy. Operational Stability refers to a highly skilled work force. “Deliver IT Training that is targeted to the needs of the organization which increases end user skills and self-sufficiency.”</p> <p><b>Strategy 9:</b> Hire, develop and retain quality staff.</p> <p><b>Strategy 10:</b> Plan for and employ the additional outside expertise to ensure the speedy and accurate completion of work.</p> <p><b>Strategy 11:</b> Establish connections and relationships with private and public entities to discover and explore potentially valuable technologies, processes, knowledge, and ideas. (Operation Star Trek)</p>
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<p><b>Goal 3: Customer Satisfaction</b></p> <p>To engage in activities that promote customer service with employees, partners and the public.</p> <p><b>Strategy 1:</b> To deliver support in a way that minimizes disruption to a customer by using tools for remote diagnosis and assistance.</p> <p><b>Strategy 2:</b> To minimize the effort needed to obtain assistance when needed and reduce frustration by making the assignment of IT resources to resolve an issue transparent to the requester.</p> <p><b>Strategy 3:</b> To expand employee and public self-service capabilities through web applications.</p> <p><b>Strategy 4:</b> To monitor customer satisfaction and take appropriate corrective action.</p> <p><b>Strategy 5:</b> To apply process improvement methods as needed to optimize the efficient delivery of IT services.</p> <p><b>Strategy 6:</b> To develop and maintain cooperation and satisfaction among IT staff.</p> <p><b>Strategy 7:</b> To apply Project Management methodology to deliver projects on time and within cost that meet stated requirements.</p> <p><b>Strategy 8:</b> To develop mutually agreed upon Service Level Agreements or Inter-Local Agreements that clearly define services between the IT Department and its customers.</p> <p><b>Strategy 9:</b> Tailor communication to our audience. Understanding of what to communicate, method of how to communicate, how much to communicate, and the impact of our communication. Keep the communication professional and unemotional.</p> <p><b>Strategy 10:</b> Communicate to all involved and interested parties. Better use of communication plans and tools: RACI, etc.</p> <p><b>Strategy 11:</b> When your first response is “NO” reconsider options and discuss with user and seek team input.</p>	<p><b>Goal 4: Innovation</b></p> <p>To continually seek to improve and facilitate the County’s efforts toward new processes and capabilities.</p> <p><b>Strategy 1:</b> Enhance our ECM capabilities to increase efficiency and reduce reliance on paper.</p> <p><b>Strategy 2:</b> To apply existing products and capabilities to newly identified requirements.</p> <p><b>Strategy 3:</b> To avoid obsolescence through planning and exploring various alternatives.</p> <p><b>Strategy 4:</b> To reduce manual processes through implementation of software and processes at the enterprise and department levels.</p> <p><b>Strategy 5:</b> To leverage existing capabilities and information in all systems and reduce redundancy through data exchange and integration.</p> <p><b>Strategy 6:</b> To ensure IT staff is competent to implement and support new technology.</p> <p><b>Strategy 7:</b> To continually look for, evaluate and apply where there is value, new technology, applications of technology and methods of IT Service delivery.</p> <p><b>Strategy 8:</b> To apply ITIL processes in the selection, design, implementation and continual improvement of IT Services.</p> <p><b>Strategy 9:</b> To listen to and involve our customers in the effort to identify new opportunities.</p> <p><b>Strategy 10:</b> To incorporate innovation tools, and Lean thinking to guide and influence the development of ideas and solutions.</p> <p><b>Strategy 11:</b> Applying the Hedgehog and Flywheel concept to deliver breakthrough solutions. Disciplined behavior. Steady, structured, focused, consistent,</p> <p><b>Strategy 12:</b> Let others (non-IT) lead innovation and define our role in that effort.</p>
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## 3.1.2 Analysis

The following information highlights key areas of the SWOT-T analysis.

### 3.1.2.1 Strengths:

The IT Department has made improvements in infrastructure over the past year by adding VXRail servers with Hyperconverged architecture. The additional processing capacity and storage has provided some relief to meet expanding requirements. Improvements planned in 2018 will bring SQL Server Enterprise licensing with the option for bringing databases in various version to the most current version supported by the applications. Although challenging to keep current and ahead of technology obsolescence, Ottawa County has done a good job of working to refresh and replace technology. The phone system replacement is planned and future capital improvements are scheduled for 2019 to refresh the main data center and expand capacity as well as replication and backup processes. Overall infrastructure continues to improve and grow with demand. The County ERP has been brought to the latest version and will be the supported version for at least three years. Security measures have been enhanced and the knowledge of County employees has improved through the security awareness program. Communication and cooperative efforts between IT and other departments has allowed projects to move forward. Projects have been completed to replace legacy software and other projects are underway.

### 3.1.2.2 Weaknesses:

Daily operational demands consume a significant portion of staff resources: Service tickets, basic work orders, standard work, etc. Administrative recording of effort becomes secondary to doing the work needed to maintain and implement technology. Potential for devolving into chaotic, inconsistent and wasteful processes create a reactionary environment. Departments make choices that impact supportability and sustainability. New initiatives suffer. The noticeable impact is a growing level of dissatisfaction with IT services, slower response, unfilled requests, and stale projects. The inability to convey an understanding of real costs across the organization makes it difficult to prioritize effort and free up internal resources. Pressure to meet urgent needs, to serve everyone at the same time creates stress on staff. Ultimately, frustration of IT staff at a perceived lack of support by their leadership poses a negative effect on morale, performance and retention. Years of internal development and customization have built an expectation that software can be developed to support every nuance of a department's operations. Migration to a more sustainable model is difficult and moving out from under legacy systems is slow. In addition, the need to migrate data to new systems is extremely difficult because the data structure between existing and new systems is completely different. Legacy issues exist in various areas, not only in data but in the challenge of changing behavior. Examples are visually represented by paper files, fax machines, and typewriters. Retention rules are so convoluted that human decision is needed on nearly every record. Compliance with all information protection requirements is extremely difficult. The acquisition process can be slow and cumbersome. The quality of a solution and vendor selection can be superseded by the emphasis on, and complexity of, government purchasing policies and the limited skills of IT staff in the acquisition process.

### 3.1.2.3 Opportunities:

The growth of fiber and the collaboration between public organizations has created an opportunity to build an interconnected Fiber Optimized Government Network (FOG-Net) in Ottawa County. An effective working relationship exists between the County government, Ottawa Area Intermediate School District,



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Grand Haven Area Public Schools, and the Holland Board of Public Works. These organizations possess the IT staff skills to implement an interconnected fiber network which provides the supporting infrastructure for sharing and consolidation of services. The collaboration provides an ability to share information on existing resources which can then be extended, reinforced and enhanced for other county public entities. With such upgrades comes the ability to support local units at lower cost with improved service. Shared service opportunities include a consolidated public entity phone system, hosting services, disaster recovery, and network redundancy. Although the unique needs of the County can be challenging, it also means that County staff possess unique knowledge and skills, and have the tools and capabilities to serve other government organizations both within the County and across the State. Collaboration beyond the county could expand the resources available and impact of collaboration efforts. The challenges of staffing which are also a threat, present an opportunity to reevaluate how the County approaches technology and services, creating a situation where a new and more sustainable model may result.

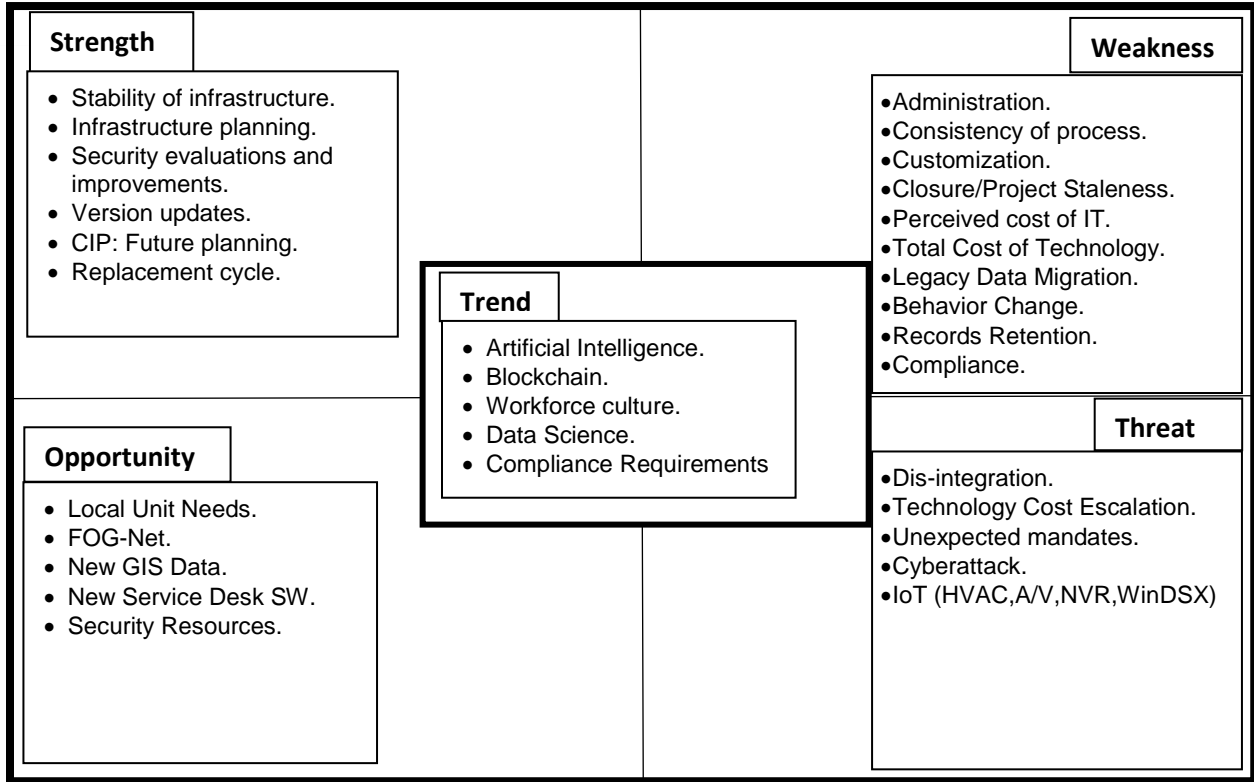
### **3.1.2.4 Threats:**

The primary threat to County technology can be summarized as stability and sustainability. Diversity of technology presents many opportunities, but also the potential for major disruption. Enthusiastic pursuit of a quick fix or a hot technology may not be a good fit in the overall technical environment of the organization. Like any ecosystem, something that fits well for one entity may be an invasive species to another. Individual preferences among the numerous departments will lead to deconsolidation/silo's if unchecked. Without a thorough review of options, potential hidden costs may result. Obtaining and retaining skills is difficult in the current competitive environment where highly technical skills are in great demand and supply is limited. Filling gaps with outside resources is expensive. The cost for software continues to increase at a rapid rate and ongoing maintenance costs increase as software companies must pay ever higher salaries to attract and retain talent. Continued evolution of cybersecurity threats require constant evaluation, education and investment. Over the past two years, the County has invested in technology, upgraded policies and expanded training by investing in online end user security awareness training. The County also hosted a cybersecurity exercise for technical staff of County collaborative members.

### **3.1.2.5 Trends:**

Trends are a unique component of the IT Strategic Plan SWOT-T analysis. Because the technology field changes so rapidly, it is important to place some emphasis on looking at the horizon to see what is coming. To quote Wayne Gretzky "I skate to where the puck is going to be, not where it has been." Not only does technology change quickly but the methods of delivering technology change. Trends may also be covered under Threats and Opportunities as they are primarily external factors. These trends influence an organization's technology strategy. However, an organization should make decisions based on a combination of fit, form and function, not based on following the crowd or the popular trend. Current trends are economic, technical, service oriented, and regulatory.

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## County of Ottawa Capital Improvement Plan Fiscal Years 2018-2023

Project Description	Current Approved	2018	2019	2020	2021	2022	2023 & Beyond	Estimated Cost
Justice System (MICA)	1,717,912	631,705	170,560					2,520,177
Justice Suite (MICA) Future Enhancements			120,000	120,000	120,000	\$ 120,000	\$ 120,000	600,000
MICA Historical Data Access	111,300	99,700						211,000
MICA Justice Integration Financials	30,000	55,000						85,000
Juvenile Justice	206,860	30,000						236,860
Touch Screen Self Service Center								-
OCCDA-LEIN-MICA Interface	50,000	(50,000)	50,000					50,000
Courtroom Technology upgrade - District	525,000	(75,000)						450,000
Courtroom Technology upgrade - Circuit/Trial GH		471,746						471,746
Courtroom Technology upgrade - Probate/Family		82,000						82,000
Touch Print fingerprint machines replacement	40,000	(40,000)	70,000					70,000
GIS Oblique & Orthophoto Imagery/LIDAR Update	318,000	46,217		132,500	98,677	98,677	330,000	1,024,071
PA Court Calendar Application	100,000							100,000
Sheriff Scheduling System	104,000							104,000
Phone System Replacement		1,000,000						1,000,000
Smart Bench Project			192,512					192,512
Server/Storage Infrastructure Refresh			1,300,000					1,300,000
MUNIS payroll			161,268					161,268
Wireless Infrastructure Refresh				89,480				89,480
Building Cabling/Recabling				400,000		200,000		600,000
WAN Refresh							240,600	240,600
EHR Insight Software Replacement		360,000						360,000
<b>Subtotal</b>	<b>3,203,072</b>	<b>2,611,368</b>	<b>2,064,340</b>	<b>741,980</b>	<b>218,677</b>	<b>418,677</b>	<b>690,600</b>	<b>\$ 9,948,713</b>