

County of Ottawa



County Technology  
Master Plan

(2010 Update)

## Summary of Changes

Document Version	Created/Modified By	Date Created/Modified	Notes
		2010	<ol style="list-style-type: none"><li>1. Goals, Objectives and Initiatives section updated based on new goals defined during 2011 Budget Planning process.</li><li>2. Basic IT Strategies section updated based on new goals defined during 2011 Budget Planning Process.</li><li>3. Technology and Service Rankings updated comments and status if applicable. Rankings remain the same as collected in 2008.</li><li>4. Updated status of entries in Technology Initiatives Investment Schedule section.</li><li>5. Removed ECM section. Refer to 2009 update for information.</li><li>6. Updated Project Plan section..</li></ol>

## County Mission Statement

*Ottawa County is committed to excellence and the delivery of cost - effective public services*

## Information Technology Mission Statement

*In partnership with our customers, the Ottawa County Information Technology Department provides cost-effective solutions and technical leadership to accomplish organizational and departmental goals, and enables delivery of excellent service that will positively impact those served by the County.*

## County Vision Statement

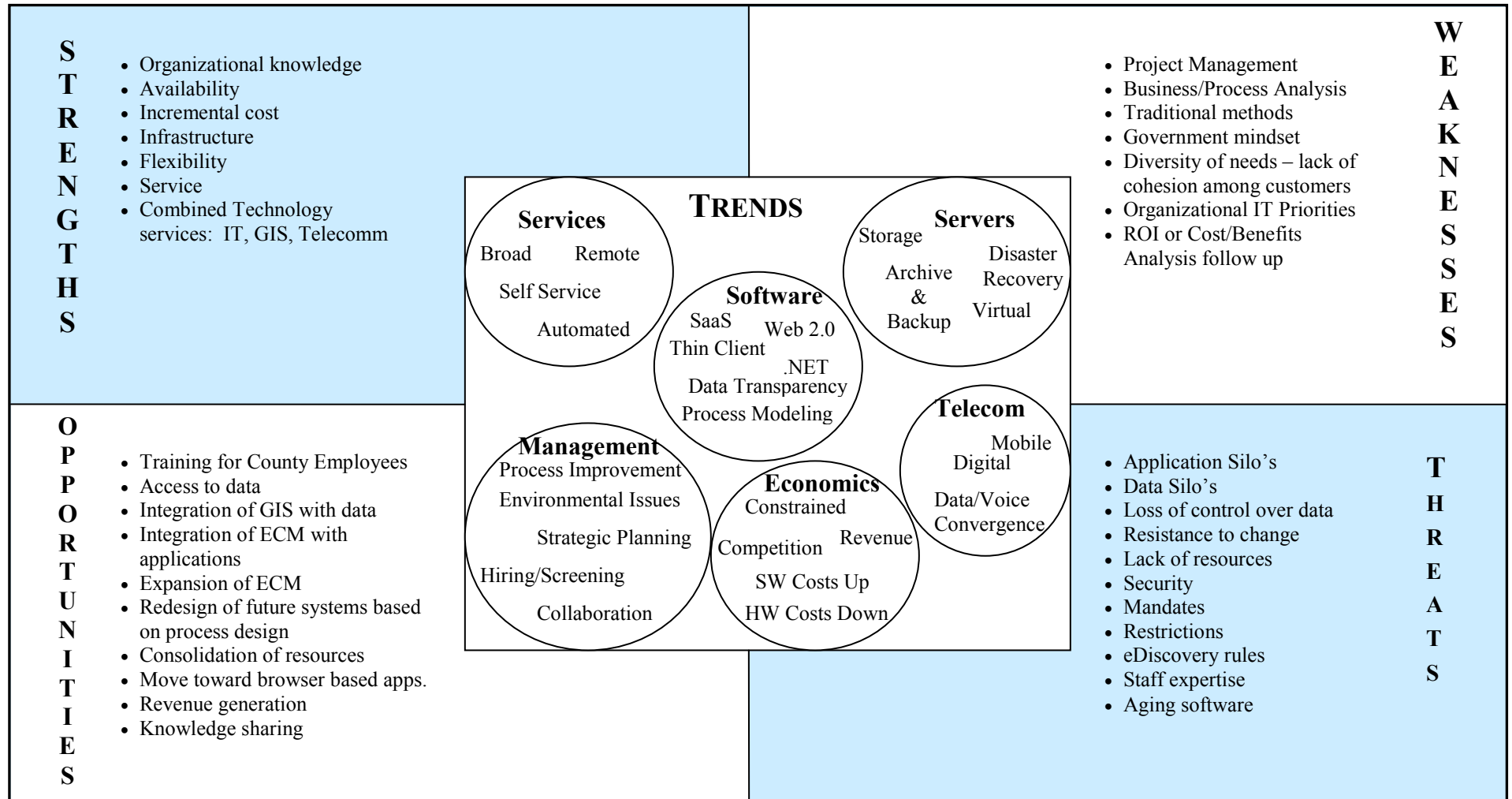
*Ottawa County strives to be the location of choice for living, working, and recreation*

## Information Technology Vision Statement

*Ottawa County will be a model of technology application for local government.*

# SWOT-T Analysis

The Information Technology Department continually evaluates the County's **strengths, weaknesses, opportunities, and threats (SWOT)** in the area of information technology. These evaluations facilitate planning and form a basis for the development of goals, objective and initiatives. Further, to identify possible opportunities and maintain a proactive approach to matching emerging technology and methods to County needs, the traditional SWOT analysis has been modified to include the identification of **Trends (SWOT-T)**. Trends include technology, issues and practices that could have an impact on County operations in the future.



# Goals, Objectives and Initiatives

## Board Goals

**Goal 1: To maintain and improve the strong financial position of the County**

**Goal 2: To maintain and enhance communication with citizens, employees, & other stakeholders**

**Goal 3: To contribute to a healthy physical, economic, and community environment**

**Goal 4: To continually improve the County's organization and services**

TARGET POPULATION	<ul style="list-style-type: none"> <li>• Citizens</li> <li>• County Employees</li> </ul>					
PRIMARY GOALS & OBJECTIVES	<p><b>Goal 1:</b> Maintain County IT Infrastructure (hardware and software)</p> <p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>1) Provide a secure system</li> <li>2) Ensure voice network availability</li> <li>3) Ensure data network availability</li> </ol> <p><b>Goal 2:</b> Provide excellent customer service/satisfaction</p> <p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>1) Provide thorough and satisfactory services</li> <li>2) Provide interaction with customers that is courteous, respectful, and friendly</li> <li>3) Provide timely responses to service requests</li> </ol> <p><b>Goal 3:</b> Improve the level of technical knowledge of County employees in County technologies</p> <p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>1) Train all employees about software programs</li> <li>2) Educate all employees regarding IT related policies</li> <li>3) Increase awareness of new technologies</li> </ol> <p><b>Goal 4:</b> Improve quality and cost-efficiency of work processes through innovation</p> <p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>1) Develop and implement new processes to contain cost, improve efficiencies, and increase customer service</li> <li>2) Review IT staffing needs to ensure staffing ratios meet work-loads</li> </ol>					
ACTIONS/ PROGRAM COMPONENTS	<p><b>Goal 1:</b> Five Year Technology Plan</p> <p><b>Goal 2:</b> Customer Service Plan and Customer Surveys</p> <p><b>Goal 3:</b> Training and Education Program</p> <p><b>Goal 4:</b> Management Plan</p>					
SELF-REPORTED AND OUTPUT MEASURES	ANNUAL MEASURES	TARGET	2008 Actual	2009 Actual	2010 Estimated	2011 Projected
	<b>Goal 1-1:</b> % IT Staff time required to recover from security breaches (Virus, Spyware, Adware, Intrusions)	0%	3.9%	4.7%	5%	5%
	<b>Goal 1-2:</b> % of time of unplanned voice network outages	0%	0.18%	0.38%	<1%	<1%
	<b>Goal 1-3:</b> % of time of unplanned data network/Server outages	0%	0.14%	0.21%	<1%	<1%
	<b>Goal 2-1:</b> % of customers satisfied with IT Help desk services	95%	96.9%	96.51%	95%	95%
	<b>Goal 2-1:</b> % of customers satisfied with IT project request services (Triennial survey)	80%	N/A	N/A	80%	N/A
	<b>Goal 2-2:</b> % of customers indicating interaction with IT was courteous, respectful, and friendly	95%	97.51%	97.79%	95%	95%
	<b>Goal 2-3:</b> % of IT services completed in a timely fashion as defined by industry standards	95%	96.09%	96.69%	95%	95%
	<b>Goal 2-3:</b> % of helpdesk calls closed within 24 hours	80%	88%	89%	80%	80%
	<b>Goal 3-1:</b> % of employees who report that training improved their ability to perform their job effectively (Triennial survey)	80%	N/A	N/A	80%	N/A
	<b>Goal 3-2:</b> % of employees who thoroughly understanding IT policies (Triennial survey)	80%	N/A	N/A	80%	N/A
	<b>Goal 3-3:</b> % of employees aware of IT technology capabilities (Triennial survey)	80%	N/A	N/A	80%	N/A
	<b>Goal 4-1:</b> # of new processes implemented that result in a positive return on-investment (cost-savings or revenue increase)	2	2	2	2	2
	<b>Goal 4-1:</b> # of new processes implemented that result in improved efficiency (time savings)	4	4	4	4	4
	<b>Goal 4-1:</b> # of new processes implemented that result in improved customer satisfaction	1	1	1	1	1
	<b>Goal 4-2:</b> IT FTEs per County FTEs	N/A	1:50	1:48	<1:40	<1:40
	<b>Goal 4-2:</b> IT User Support FTEs per County FTEs	N/A	1:157	1:142	<1:150	<1:150

# Goals, Objectives and Initiatives

	<b>Goal 4-2:</b> IT User Support FTEs per IT computer device (i.e. computer, printer, laptop, scanner)	N/A	1:504	1:534	<1:500	<1:500
<b>OUTCOME MEASURES</b>	<b>Goal 4-2:</b> Cost of IT per County FTE	N/A	\$2,453	\$2,666	<\$3,000	<\$3,000
	<b>Goal 4-2:</b> Cost of Helpdesk per number of calls processed	N/A	\$21.320	\$19.86	<\$18/Call	<\$18/Call

# Basic IT Strategies

## **Goal 1: Maintain County IT Infrastructure (hardware and software)**

### **Objectives:**

- 1) Provide a secure system
- 2) Ensure voice network availability
- 3) Ensure data network availability

**Strategy 1:** To avoid obsolescence, manage maintenance costs, and ensure reliable operations through consistent scheduled replacement of hardware.

**Strategy 2:** To maintain existing systems through maintenance contracts and upgrades provided by the vendor.

**Strategy 3:** To invest in proven technology based on cost justified requirements.

**Strategy 4:** To continually evaluate the threat environment and implement effective countermeasures.

**Strategy 5:** To evaluate new technology in a systematic way and adapt technology which shows a high potential for success in terms of acceptance and Return On Investment (ROI).

**Strategy 6:** To guide the County's technology investment by maintaining a five year 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.

## **Goal 2: Provide excellent customer service/satisfaction**

### **Objectives:**

- 1) Provide thorough and satisfactory services
- 2) Provide interaction with customers that is courteous, respectful, and friendly
- 3) Provide timely responses to service requests

**Strategy 1:** To deliver support in a way that minimizes disruption to a customer by using tools for remote diagnosis and assistance.

**Strategy 2:** 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.

**Strategy 3:** To expand employee and public self-service capabilities through web applications.

**Strategy 4:** To develop a technically capable and informed workforce.

**Strategy 5:** To apply ITIL and other process improvement methods as appropriate to optimize the efficient delivery of IT services.

## **Goal 3: Improve the level of technical knowledge of County employees in County technologies**

### **Objectives:**

- 1) Train all employees about software programs

# Basic IT Strategies

- 2) Educate all employees regarding IT related policies
- 3) Increase awareness of new technologies

**Strategy 1:** 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.

**Strategy 2:** To participate in and facilitate departmental and enterprise technology planning and decision-making.

**Strategy 3:** To increase public awareness of GIS products and capabilities.

**Strategy 4:** To Increase awareness of IT products and capabilities in County departments.

**Strategy 5:** To provide computer software training services to County employees and use new methods of delivering training that increases convenience for employees.

## **Goal 4: Improve quality and cost-efficiency of work processes through innovation**

### **Objectives:**

- 1) Develop and implement new processes to contain cost, improve efficiencies, and increase customer service
- 2) Review IT staffing needs to ensure staffing ratios meet work-loads

**Strategy 1:** To leverage Electronic Content Management as an enterprise solution.

**Strategy 2:** To apply existing products and capabilities to newly identified requirements.

**Strategy 3:** To move aggressively as practical toward thin client (browser) based applications.

**Strategy 4:** To improve the current Justice System through refacing into a web accessible application, reengineer the database and add enhancements as practical with funding limitations.

**Strategy 5:** To replace the Financial System with a more capable system that will allow greater outsourcing of functions from Fiscal Services to Departments, increased automation of manual processes, integration with ECM and expanded functionality to support the Human Resources processes.

**Strategy 6:** To leverage information in all systems through data exchange and integration.

# Technology and Service Rankings

The following list reflects key technology categories and specific technology issues. The current status of each issue is explained and rankings are based on scores provided by the Special Technology Committee, Department Heads and Elected Officials, and IT Staff.

	5	Poor				
	4	Less than Adequate				
	3	Borderline				
	2	Adequate				
	1	Good				
Count	Item	Average Rank	Status	2009 Comments	2009 Status	2010 Comments
	<b>Infrastructure</b>					
1	Security - Equip	9.038	3	Network vulnerability test completed – no high or critical findings. Identified issues addressed.	2	Protects against major events. Web filtering is planned for 2011.
2	Servers	7.790	3	Expanded Server and storage capability in Grand Haven to support Disaster Recovery	2	Server infrastructure continues to adapt to rapid growth. Disaster Recovery plan is solid. Further refinement and testing planned for 2011.
3	Network	7.391	1	Internet Bandwidth increased from 3Mb to 10Mb full duplex	1	<b>No Change.</b>
4	Courtroom Technology	7.246	4	New Courthouse equipment standardized and installed. Resolving post implementation issues.	2	Upgrades to Hudsonville and Holland in 2010 will standardize across all Courtrooms.
5	Contingency Capability	7.228	3	Refer to item 2. Ongoing evaluation and improvement.	2	Well documented process for off site replication, backup and emergency. Plan is current. Changes are ongoing as systems change. Testing needs to be expanded.
6	End User Equipment	6.835	2	Adequate – newer applications are requiring more robust computers. During the past year this has resulted in unplanned upgrades.	2	No Change.
7	Wireless	6.456	2	New GH Courthouse has wireless coverage of Courtrooms and limited in other areas. Access is currently restricted to essential employees.	2	Continue to expand intrabuilding wireless: CMH complete. Fillmore Admin, Hudsonville and Public Health in process.
8	Phone System	5.860	3	System was reviewed in 2009 and budgeted for upgrade in 2010.	3	Implementation in process.
9	Video Conferencing	5.675	5	No Change	5	No Change.
10	Mobile Technology	5.282	1	Additional laptop and wireless capability.	2	Demand and elimination of PDA's is putting increased pressure on mobile device investment.
11	Voice/Data Convergence	5.238	5	Integration possible if planned phone system upgrade completed in 2010.	5	Refer to Item 8 Infrastructure Section
12	Board Room Technology	4.456	1	No Change	2	Plan to review in 2011.

# Technology and Service Rankings

	Applications					
1	Justice System	8.548	5	Large, limited and Impacts high percentage of County Departments (Same as 2008)	5	No Change
2	Web	8.523	1	Ongoing enhancements to system installed in 2005 (Same as 2008)	1	No Change
3	Imaging	8.396	1	Expanded to HR On-line Application System. Criminal workflow expanded to Holland DC. Some issues with Workflow licensing limits.	1	Enhancements using existing capabilities continue to streamline processes and connect with external agencies: Holland PD, DHS.
4	Financial System	7.507	4	Requirements being evaluated for a new system this year. Effort put on hold.	4	ERP planning underway with tentative implementation in 2011 & 2012
5	Court/Prosecutor Scheduling	7.253	5	Currently part of Justice System (Same as 2008).	5	No Change.
6	Intranet	7.215	4	No Change. Superseded by other priorities.	4	No Change.
7	Food Inspections	7.178	2	Would like to replace. But adequate.	2	No Change.
8	Human Resources	7.016	5	Financial System supports but has not been used due to limitations. (Same as 2008) Some automation of workflow through web and Lotus Notes.	5	No Change. Refer to Item 4 Applications Section.
9	Collections	6.908	5	Justice System records Judgements, not payments. Access Database supports Clerk's Payment tracking. (Same as 2008)	5	Process for tracking and viewing all Court and Sheriff costs is currently being reviewed.
10	GIS	6.872	1	Upgraded in 2007-2008. (Same as 2008)	1	No Change.
11	E-Mail	6.845	2	Re 2008 comments, ref Voice/Data Convergence (Infrastructure Item 11). Need a centralized archive capability.	3	New Phone system approved will provide convergence of Voice/Data . Centralized archiving effort initiated. Mail management is a problem.
12	Land Records Management	6.750	1	New system installed June 2009	2	Performance issues and ongoing development is requiring reconfiguration and upgrade of hardware and software.
13	CourtStream	6.494	1	Enhancements completed in 2009.	1	No Change.
14	Asset Management	6.152	5	Asset Management System scheduled for implementation by end of 2009	3	Initial limited deployment. Rollout delayed.
15	Field Reporting for Env/Public Health	6.137	5	No capability	5	No Change.
16	Help Desk Software	6.012	1	Footprints application installed in 2006, continue to refine procedures and add tracking systems	1	No Change.
17	Performance Management	5.946	5	No Capability other than Help Desk software for IT	3	Improvement in systems will enhance information.

# Technology and Service Rankings

Applications						
18	CMH	5.757	2	Ongoing enhancements to system installed in 2005	2	System reconfiguration and upgrade needed. Federal Meaningful Use requirements.
19	JIS - Probate Court	5.639	4	Used by Probate Court. State is developing next generation with expected completion in 2011	4	Plan to blend with new County Justice System
20	Public Health	5.574	2	System installed April 2009.	2	Capabilities being extended. Improvements in EMR needed to meet Federal Health Care guidelines over the next four years.
21	Property System	4.931	1	BS&A Upgraded (Tax, Assessing, Drains Assessing and Drains Ledger Oct 2009)	2	Delinquent Tax upgraded in 2010. Performance issues may require server reconfigurations.
Services						
1	Security - Service	8.569	2	Ongoing investment needed	2	Network Security Test complete. Plan Web Filtering in 2011.
2	IT Staff Technical Training	8.173	2	Ongoing need to keep staff current	2	New software development & support skills.
3	Cost Containment	7.868	3	Software Costs are escalating. With each new system the costs will increase and increases exceed CPI. Consolidation where possible.	3	No Change.
4	IT Staff Resources	7.361	2	Demand will and should exceed capacity	3	Demand growing. Use Consultants & Contract Svcs
5	Employee Computer Training	7.284	1	HR & IT Collaboration has been effective.	2	New OS & Apps will require changes in training.
6	Purchasing/Installing Equipment	7.068	2	Extends over a period of 6 months or more based on other support requirements and staff shortages.	2	No Change.
7	Custom Application Development	6.746	3	Demand exceeds capacity. Ongoing prioritization without adding resources.	3	ERP System with limited or no customization. More End User tools for reporting and analysis.
8	IT Governance	6.636	2	IT Oversight, considers IT a strategic asset, acceptable policies and procedures	2	No Change.
9	Help Desk	6.618	2	Centralization of support call handling, continue to shift a broader range of support calls to Help Desk	2	Need automated software and patch deployment.
10	Law Enforcement Specific Support	6.568	4	Dedicated resource for the Sheriff similar to that provided to Public and Mental Health	4	No Change.
11	Hosting for Local Units	6.409	3	Bandwidth of Internet increased from 3Mb to 10Mb. GIS added one partner. One LU hosting for online payments.	3	GIS added one partner. First LU hosted for Enterprise Content Management (ECM).
12	User Services	6.133	2	On site support, continue to shift a broader range of support issues to User Services staff	2	No Change. Refer to Services Item 9.
13	Contracted Support	5.605	2	Support specialized needs, vendor supplied systems resources that don't require staff increases.	2	Challenges in coordinating service and obtaining complete and satisfactory performance.

Item	Average Rank	Estimated Minimal Investment	Estimated Maximum Investment	Estimated Annual Cost	2009	2010	2011	2012	2013
Security - Infrastructure	9.038	\$50,400	\$199,700		\$7,000	\$52,000	\$20,000	\$700	\$50,000
<b>Actions: 2009 Replaced Firewalls. 2011 Web Filtering.</b>					<b>\$5,106</b>	<b>\$0</b>			
Justice System	8.548	\$500,000	\$3,000,000		\$35,000	\$440,000	\$300,000	\$300,000	\$300,000
<b>Actions: 2009 Initiated Process Review. 2010 Functional Specs &amp; Development</b>					<b>\$67,000</b>	<b>\$300,000</b>			
Imaging	8.396	\$194,600		\$25,600			\$24,000		
<b>Actions: 2009 Expanded capability with existing resources. 2011 Adding Licensing</b>					<b>\$0</b>				
Web	8.523				\$235,000	\$242,050	\$234,000	\$249,312	\$249,312
<b>Actions: Extended Contract through August 2010</b>					<b>\$234,000</b>	<b>\$234,000</b>			
Servers	7.790		\$368,209		\$47,944	\$165,143	\$93,514	\$42,578	\$19,030
<b>Actions: Additional VM Servers &amp; SAN</b>					<b>\$37,500</b>	<b>\$20,000</b>			
Courtroom Technology	7.246	\$400,000	\$1,300,000		\$500,000				
<b>Actions: New Courthouse</b>					<b>\$544,000</b>				
Food Inspections	7.178	\$0	\$26,000			\$26,000			
Court/Prosecutor Scheduling	7.253	\$200,000	\$400,000		<b>Discontinue - refer to "Justice System" entry</b>				
<b>Actions: Costs will become part of the Justice System - Costs added to that effort</b>									
Network	7.391								
Contingency Capability	7.228	\$20,000	\$100,000		\$50,000				
<b>Actions: Additional Storage and Memory to existing VM's and relocated to GH</b>					<b>\$46,650</b>				
Collections	6.908	\$75,000	\$150,000		<b>Discontinue - refer to "Justice System" entry</b>				
Law Enforcement Specific Support	6.568	\$75,000	\$96,000	\$85,500					
Hosting for Local Units	6.409			(\$5,000)		(\$12,000)	(\$17,600)	(\$18,000)	(\$18,000)
<b>Actions: Ongoing identification of collaboration and cost sharing opportunities using web site and Imaging</b>					<b>(\$150)</b>	<b>(\$6,100)</b>			
Land Records Management	6.750	\$300,000	\$500,000	\$53,020	\$500,000	\$53,020	\$53,020	\$133,000	\$53,020
<b>Actions: New Land Management System Installed June 2009, Pay over three years.</b>					<b>\$299,725</b>	<b>\$175,955</b>	<b>\$155,421</b>		
E-Mail	6.845	\$100,000	\$200,000					\$100,000	

Item	Average Rank	Estimated Minimal Investment	Estimated Maximum Investment	Estimated Annual Cost	2009	2010	2011	2012	2013
End User Equipment	6.835		\$2,161,322		\$450,000	\$614,073	\$482,000	\$228,034	\$353,800
<b>Actions: Replaced Equipment per recommendations</b>					<b>\$425,000</b>	<b>\$439,200</b>			
CourtStream	6.494	\$75,000	\$1,000,000	\$35,000					
<b>Actions: No major investments planned at this time.</b>					<b>\$500,000</b>				
Wireless	6.456	TBD				\$90,000			
<b>Actions: 2009 New Courthouse, 2010: CMH, Fillmore Admin, Hudsonville Courts</b>					<b>\$14,029</b>	<b>\$41,000</b>			
Asset Management	6.152	\$12,000	\$25,000		\$22,900				
<b>Actions: Module purchased, installed.</b>					<b>\$22,900</b>				
Financial & HR System	7.507	\$600,000		\$50,000		<del>\$600,000</del>	\$750,000		
Field Reporting for Env/PH	6.137	\$50,000	\$100,000						
Phone System	5.860	TBD			TBD	\$26,000	\$58,000	\$58,000	\$58,000
<b>Actions: In process to Upgd total Cost \$580,000</b>					<b>\$11,700</b>				
Video Conferencing	5.675	\$40,000	\$300,000						
JIS - Probate Court	5.639	\$200,000	\$500,000		<b>Discontinue - refer to "Justice System" entry</b>				
Public Health	5.574	\$200,000	\$400,000	\$49,000					
Mobile Technology	5.282			\$126,000	\$127,536	\$129,072	\$130,608	\$132,144	
Property System & Other(BS&A)	4.931	\$148,000	\$225,000	\$42,000		\$178,000	\$78,000	\$45,000	\$42,000
<b>Actions: Contract approved May 31, 2009. Funded ROD Tech &amp; Treas Del Fd,</b>					<b>\$34,544</b>	<b>\$64,482</b>	<b>\$43,776</b>	<b>\$40,496</b>	<b>\$40,496</b>
Board Room Technology	4.456	TBD				No Action	TBD		
GIS Ortho Layer Update		\$120,000	\$170,000						\$130,000
		<b>\$3,385,000</b>	<b>\$11,321,231</b>	<b>\$408,100</b>	<b>\$1,270,354</b>	<b>\$1,446,537</b>	<b>\$1,517,319</b>	<b>\$1,216,264</b>	<b>\$1,297,658</b>

- **Contract discount 25% for Tax, Delinquent Tax, Assessing; 75% for Drains. Additional 20% discount for early contract. Projected costs include an 18% annual maintenance cost based on full product price. Payment over three years. In 2009, the Assessing, Tax, Drains Assessing and Drains Ledger systems were implemented. Delinquent Tax was completed in 2010.**