

Oakland County Department of Information Technology Project Scope and Approach

Project Name: BOC Technology Assessment & Program

Project ID: DJ0511AP

Leadership Group: Finance/Admin					
Department: Board of Commissioners			Division: BOC		
Project Sponsor: Chris Ward		Date Requested: 03/11/20		PM Customer No. 511	
Request Type: <u><i>New Development</i></u> <i>Enhancement</i> <i>Customer Support</i> <i>Planned System Maintenance or Upgrade</i>					
IT Team Name: eCommerce			IT Team No: J		
Project Manager/Leader: Dawn Clark					
Account Number:	91404	Account Description:	BOC - CUSTOMER SUPPT	Customer Name:	Board of Commissioners
Grant Funded?		Yes <u>No</u>	Mandate? Yes <u>No</u>		
		Mandate Source:			

Project Goal

To conduct an assessment of technology needs of the Board of Commissioners (BOC) and determine the appropriate solutions for board activities such as meeting management, document approval workflows, data retention of BOC materials (i.e., meeting minutes, questionnaires, resolutions, etc.) on any device, anywhere, at any time as well as video conferencing, presentations and broadcasting, so that there is increased productivity and efficiencies in the execution of BOC duties as well as increased quality, reliability, effectiveness and efficiency in both offline and real time communication with the Public.

Business Objective #1

To understand current County and market based options. develop an RFP for system selection. determine high level technical, integration, and implementation approach.

Major Deliverables

- Detailed Project Plan
- Assessment of current County platforms and market options
- Request(s) for Proposal
- Integration & implementation approach

Approach

- Develop Detailed Project Plan
- Review current business process and conduct needs assessment with customer, ensuring current manual processes are refined and automated

Oakland County Department of Information Technology Project Scope and Approach

Project Name: BOC Technology Assessment & Program

Project ID: DJ0511AP

- Develop assessment of current software and hardware options including current County platforms and integration points.
- Develop an RFP
- Select vendor(s) based on vendor demonstrations
- Determine system integration strategies

Business Objective #2

To provide a solution for the BOC to manage the review and approval of documents through real-time annotation, version control, multi-departmental automated workflow, electronic voting, including attendance tracking via a portal platform that is accessible on laptops and mobile devices (i.e., smart phones, tablets, etc.), both onsite and remotely.

Major Deliverables

- Detailed Project Plan
- End User Hardware and Software Requirements document
- Vendor Selection
- Vendor SOW and Contract
- Application and/or System Requirements
- End User Hardware and Software Requirements Document
- Technical Design Document
- Technical Architecture Diagram
- Training Plan
- User Acceptance Test Plan
- Implementation Plan
- Training/User Manual(s)
- Application Code
- Service Level Agreement
- Disaster Recovery Toolkit
- Service Center Knowledge Documents

Approach

- Develop Detailed Project Plan
- Review current business process and conduct needs assessment with customer, ensuring current manual processes are refined and automated.
- Select vendor based on vendor demonstrations
- Collaborate with vendor on contract and SOW
- Document system requirements
- Determine and document system architecture and diagram
- Assess User Hardware and Software Requirements
- Conduct Tech Review
- Order hardware and software if needed
- Develop Implementation Plan

Oakland County Department of Information Technology Project Scope and Approach

Project Name: BOC Technology Assessment & Program

Project ID: DJ0511AP

- Develop new system
- Develop User Acceptance Test Plan
- Test new system
- Acquire User Acceptance Sign off
- Conduct Change Control
- Develop User Documentation, SLA, Disaster Recovery Toolkit, Service Center Knowledge Documents
- Train users on new system
- Release new system into production

Business Objective #3

To provide a solution to ensure effective, efficient and compliant data records management of BOC documents and historical archives, for retention as well as disposition, through a role-based accessible, workflow approval-driven system as well as allow for the scanning and OCR of current documents.

Major Deliverables

- Detailed Project Plan
- End User Hardware and Software Requirements document
- Vendor Selection
- Vendor SOW and Contract
- Application and/or System Requirements
- End User Hardware and Software Requirements Document
- Technical Design Document
- Technical Architecture Diagram
- Training Plan
- User Acceptance Test Plan
- Implementation Plan
- Training/User Manual(s)
- Application Code
- Service Level Agreement
- Disaster Recovery Toolkit
- Service Center Knowledge Documents

Approach

- Develop Detailed Project Plan
- Review current business process and conduct needs assessment with customer, ensuring current manual processes are refined and automated.
- Select vendor based on vendor demonstrations
- Collaborate with vendor on contract and SOW
- Document system requirements
- Determine and document system architecture and diagram

Oakland County Department of Information Technology Project Scope and Approach

Project Name: BOC Technology Assessment & Program

Project ID: DJ0511AP

- Assess User Hardware and Software Requirements
- Conduct Tech Review
- Order hardware and software if needed
- Develop Implementation Plan
- Develop new system
- Develop User Acceptance Test Plan
- Test new system
- Acquire User Acceptance Sign off
- Conduct Change Control
- Develop User Documentation, SLA, Disaster Recovery Toolkit, Service Center Knowledge Documents
- Train users on new system
- Release new system into production

Business Objective #4

To provide the BOC an efficient and effective solution to conduct on-site and remote meeting utilizing a quality video conference and wireless presentation solution that will allow multiple participants to share their screens for interaction, which includes connections to cameras and new video endpoints.

Major Deliverables

- Detailed Project Plan
- End User Hardware and Software Requirements document
- Vendor Selection
- Vendor SOW and Contract
- Application and/or System Requirements
- End User Hardware and Software Requirements Document
- Technical Design Document
- Technical Architecture Diagram
- Training Plan
- User Acceptance Test Plan
- Implementation Plan
- Training/User Manual(s)
- Application Code
- Service Level Agreement
- Disaster Recovery Toolkit
- Service Center Knowledge Documents

Approach

- Develop Detailed Project Plan
- Review current business process and conduct needs assessment with customer, ensuring current manual processes are refined and automated.
- Select vendor based on vendor demonstrations

Oakland County Department of Information Technology Project Scope and Approach

Project Name: BOC Technology Assessment & Program

Project ID: DJ0511AP

- Collaborate with vendor on contract and SOW
- Document system requirements
- Determine and document system architecture and diagram
- Assess User Hardware and Software Requirements
- Conduct Tech Review
- Order hardware and software if needed
- Develop Implementation Plan
- Develop new system
- Develop User Acceptance Test Plan
- Test new system
- Acquire User Acceptance Sign off
- Conduct Change Control
- Develop User Documentation, SLA, Disaster Recovery Toolkit, Service Center Knowledge Documents
- Train users on new system
- Release new system into production

Research & Analysis

Gartner Research Recommendation

Objective #1 & Objective #3 -

Gartner recommends enabling virtual board meetings with tabulated voting by implementing separate solutions for each.

)

Objective #2 -

Gartner recommends performing an audit or inventory of the current records management practices and technologies to determine a current maturity level. Additionally build a firm foundation at the current level of maturing before attempting to reach the next level.

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users 100+ (Oakland County Board of Commissioners and staff, Departments and the Public)

Divisions All County Divisions

Leadership Groups All

**Oakland County
Department of Information Technology
Project Scope and Approach**

Project Name: BOC Technology Assessment & Program

Project ID: DJ0511AP

Risk

Business Environment MEDIUM – Project will change the current business process.
Technical Environment MEDIUM – Previously implemented technologies with new aspects and/or new requirements.

Assumptions

Staffing IT Staffing: resources will be available for the hours indicated per the attached project plan.

Other Staffing: additional staffing will be available as follows:

<u>Role:</u>	<u>Name</u>	<u>Hours per Day</u>
Project Sponsor:	Chris Ward	As Needed

Facilities

- None

Technical

- None

Funding

- IT

Other

- None

Priority

Constraints

- None identified at this time

Exclusions

- None identified at this time

Oakland County Department of Information Technology Project Scope and Approach

Project Name: BOC Technology Assessment & Program

Project ID: DJ0511AP

PROJECT PHASE AUTHORIZATION

Phase(s):	
Total Estimated Application Services	Hours: 2,744
Total Estimated Technical Systems	Hours: 252
Total Estimated CLEMIS	Hours:
Total Estimated Internal Services	Hours:
IT Application Services Division Manager Approval:	Date:
IT Technical Systems Division Manager Approval:	Date:
IT CLEMIS Division Manager Approval:	Date:
IT Internal Services Division Manager Approval:	Date:
IT Management Approval:	
Approved: Yes No	Date:
Reason:	
Project Sponsor Approval:	
Title:	Date:

PROJECT SUMMARY

Authorized Development (see above)	Hours:
Preliminary Estimated Development for Future Phases	Hours:
Grand Total Estimated Development	Hours: 2,996 Cost: \$494,340

Oakland County Department of Information Technology Project Scope and Approach

Project Name: BOC Technology Assessment & Program

Project ID: DJ0511AP

PROJECT COMPLETION AUTHORIZATION

Customer Acceptance of Product:	
Title:	Date:
Project Office Review:	Date:

BOC Technology Assessment & Program - Size Estimate (+/- 10% to 50%)				
Type	ID	Task Name	Estimated Hours	Estimate Notes
1 Phase	000000	PROJECT MANAGEMENT	743	
2 Phase	100000	DEVELOP RFP & SELECT VENDOR	207	
3 Phase	200000	DEFINE BUSINESS REQUIREMENTS	197	
4 Phase	300000	DESIGN SYSTEM ARCHITECTURE	124	
5 Phase	400000	IMPLEMENT VENDOR APPLICATION	935	
6 Phase	500000	IMPLEMENTATION PHASE	700	
7 Phase	600000	POST IMPLEMENTATION SUPPORT	90	
8				
1			2,996	

Oakland County -- BOC Tech Assessment Program

Return on Investment Analysis

Project Summary

Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Benefits/Savings:							
Tangible Benefits Subtotal:	0	0	0	0	0	0	0
Cost Avoidance Subtotal:	0	0	0	0	0	0	0
Costs:							
Development Services Subtotal:	558,679	9,999	10,099	10,200	10,302	10,405	609,684
Hardware Subtotal:	38,718	0	0	0	0	0	38,718
Software Subtotal:	95,560	96,516	97,481	98,456	99,440	100,435	587,887
Infrastructure Subtotal	83,958	0	0	0	0	0	83,958
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
Annual Statistics:							
Annual Total Savings	0	0	0	0	0	0	0
Annual Total Costs	776,915	106,515	107,580	108,656	109,742	110,840	1,320,247
Annual Return on Investment	(776,915)	(106,515)	(107,580)	(108,656)	(109,742)	(110,840)	(1,320,247)
Annual Costs/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Project Cumulative Statistics:							
Cumulative Total Savings	0	0	0	0	0	0	0
Cumulative Total Costs	776,915	883,430	991,009	1,099,665	1,209,407	1,320,247	1,320,247
Cumulative Return on Investment	(776,915)	(883,430)	(991,009)	(1,099,665)	(1,209,407)	(1,320,247)	(1,320,247)
Cumulative Cost/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Year Positive Payback Achieved							NO PAYBACK
State or Federal Mandate?							
Signatures:							
Benefits Reviewed By Project Sponsor	_____			Date:	_____		
Costs (including IT Resources) Reviewed By Information Technology Project Manager	_____			Date:	_____		

Oakland County -- BOC Tech Assessment Program
 Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
Increase efficiency in preparing for and conducting BOC meetings	Intangible Benefit					0	
Increase efficiency in submission and approval of board resolutions	Intangible Benefit					0	
Increase efficiency and accessibility to BOC documents (i.e., meeting minutes, resolutions, questionnaires, etc.)	Intangible Benefit					0	
Increase efficiency and assured compliance to data retention policies for BOC documents (i.e., meeting minutes, resolutions, questionnaires, etc.)	Intangible Benefit					0	
Enhanced experience for the Public participating in BOC meetings	Intangible Benefit					0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	

Oakland County -- BOC Tech Assessment Program

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
						0	

Oakland County -- BOC Tech Assessment Program

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Affects Project ROI?						Potential Savings Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
Increase efficiency in preparing for and conducting BOC meetings	Intangible Benefit												
Increase efficiency in submission and approval of board resolutions	Intangible Benefit												
Increase efficiency and accessibility to BOC documents (i.e., meeting minutes, resolutions, questionnaires, etc.)	Intangible Benefit												
Increase efficiency and assured compliance to data retention policies for BOC documents (i.e., meeting minutes, resolutions, questionnaires, etc.)	Intangible Benefit												
Enhanced experience for the Public participating in BOC meetings	Intangible Benefit												

Oakland County -- BOC Tech Assessment Program

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Affects Project ROI?						Potential Savings Extensions						
		Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6	

Oakland County -- BOC Tech Assessment Program

Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
<i>Tangible Benefits Subtotal:</i>							
Cost Avoidance:							
<i>Cost Avoidance Subtotal:</i>							
Intangible Benefit:							
Increase efficiency in preparing for and conducting BOC meetings							
Increase efficiency in submission and approval of board resolutions							
Increase efficiency and accessibility to BOC documents (i.e., meeting minutes, resolutions, questionnaires, etc.)							
Increase efficiency and assured compliance to data retention policies for BOC documents (i.e., meeting minutes, resolutions, questionnaires, etc.)							
Enhanced experience for the Public participating in BOC meetings							

Oakland County -- BOC Tech Assessment Program

Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Savings Total:							

Oakland County -- BOC Tech Assessment Program

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?						
								Y1	Y2	Y3	Y4	Y5	Y6	
IT Hours - New Development	Development Svcs		HR	2,996	165	494,340		X						
IT Hours - System Maintenance	Development Svcs				165	0								
IT Hours - Customer Support	Development Svcs		HR	40	165	6,600	1.010		X	X	X	X	X	X
IT Hours - Planned Maintenance	Development Svcs		HR	20	165	3,300	1.010		X	X	X	X	X	X
User Hours - New Development	Development Svcs					0								
User Hours - PTNE/OT	Development Svcs					0								
Contractor Professional Services (Video set up and intial meeting assistance - 3)	Development Svcs		EA	1	1,580	1,580		x						
Contractor Professional Services (Video Production System Upgrades)	Development Svcs		EA	1	9,680	9,680		x						
Contractor Professional Services (Display Installation)	Development Svcs		EA	1	3,504	3,504		x						
Contractor Professional Services (Committee Room Upgrades)	Development Svcs		EA	1	22,650	22,650		x						
Contractor Professional Services (BMS Installation and training)	Development Svcs		EA	1	26,925	26,925		x						
PC System - Acquisition	Hardware				687	0								
PC System - Maintenanc	Hardware		EA		2,936	0								
Notebook - Acquisition	Hardware				1,115	0								
Notebook - Maintenance	Hardware				3,024	0								
Tablet Notebook - Acquisition	Hardware				1,421	0								
Tablet Notebook - Maintenance	Hardware				2,800	0								
Laserprinter - Acquisition	Hardware				1,432	0								
Laserprinter - Maintenance	Hardware				1,408	0								
PC Maintenance User Owned	Hardware				2,720	0								
Printer Maintenance User Owned	Hardware				1,264	0								
File Space (100GB)	Hardware		ANN		23	0								
Package Software - Acquisition (BMS)	Software		ANN	1	95,560	95,560	1.010	X	X	X	X	X	X	X
Package Software - Maintenance	Software		ANN			0								
Business Objects Access	Software					0								
Term Emulation SFTW-Acquisition	Software					0								
Term Emulation SFTW-Maintenance	Software					0								
Server - Acquisition/Upgrade	Infrastructure				8,000	0								

Oakland County -- BOC Tech Assessment Program
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?							
								Y1	Y2	Y3	Y4	Y5	Y6		
Server - Maintenance	Infrastructure				360	0									
Server Sftwre - Acquisition/Upgrade	Infrastructure				335	0									
Server Sftwre - Maintenance	Infrastructure					0									
Server Rack Mount	Infrastructure				400	0									
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure				21,372	0									
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure				3,432	0									
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure				24,533	0									
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure				20,759	0									
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure				16,985	0									
SQL Server Enterprise - Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure				4,218	0									
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure				6,398	0									
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure				5,414	0									
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure				4,429	0									

Oakland County -- BOC Tech Assessment Program
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?							
								Y1	Y2	Y3	Y4	Y5	Y6		
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure				1,100	0									
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				3,506	0									
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				701	0									
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				13,180	0									
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				2,635	0									
SSL Certificate	Infrastructure				845	0									
Internet Access	Infrastructure				180	0									
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure		ANN		500	0									
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure		ANN		415	0									
Database (5 GB) on Consolidated SQL Instance Server	Infrastructure		ANN		930	0									
Database Instance (125 GB DB) on Consolidated SQL Server	Infrastructure		ANN		2,395	0									
Database SQL Maint Server	Infrastructure		ANN		834	0									
Database SQL Server Physical	Infrastructure		ANN		19,158	0									
DB Maintenance (Annual Cycle \$610)	Infrastructure		ANN		610	0									
DB Maintenance (Semi-Annual Cycle \$1220)	Infrastructure		ANN		1,220	0									
DB Maintenance (Semi-Annual Cycle \$2440)	Infrastructure		ANN		2,440	0									
Dedicated Virtual Server	Infrastructure		ANN		4,150	0									
DB Instance Setup	Infrastructure				976	0									

Oakland County -- BOC Tech Assessment Program
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?					
								Y1	Y2	Y3	Y4	Y5	Y6
DBA MS SQL Database Creation on Existing Instance	Infrastructure				366	0							
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$601 On Premise Physical Server = N/A	Infrastructure		ANN			0							
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$9,288	Infrastructure		ANN			0							
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$9,751	Infrastructure		ANN			0							
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$3,167 On Premise Physical Server = \$10,446	Infrastructure		ANN			0							
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$12,906	Infrastructure		ANN			0							

Oakland County -- BOC Tech Assessment Program

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs	494,340.00					
IT Hours - System Maintenance	Development Svcs						
IT Hours - Customer Support	Development Svcs		6,666.00	6,732.66	6,799.99	6,867.99	6,936.67
IT Hours - Planned Maintenance	Development Svcs		3,333.00	3,366.33	3,399.99	3,433.99	3,468.33
User Hours - New Development	Development Svcs						
User Hours - PTNE/OT	Development Svcs						
Contractor Professional Services (Video set up and intial meeting assistance - 3)	Development Svcs	1,580.00					
Contractor Professional Services (Video Production System Upgrades)	Development Svcs	9,680.00					
Contractor Professional Services (Display Installation)	Development Svcs	3,504.00					
Contractor Professional Services (Committee Room Upgrades)	Development Svcs	22,650.31					
Contractor Professional Services (BMS Installation and training)	Development Svcs	26,925.00					
PC System - Acquisition	Hardware						
PC System - Maintenanc	Hardware						
Notebook - Acquisition	Hardware						
Notebook - Maintenance	Hardware						
Tablet Notebook - Acquisition	Hardware						
Tablet Notebook - Maintenance	Hardware						
Laserprinter - Acquisition	Hardware						
Laserprinter - Maintenance	Hardware						
PC Maintenance User Owned	Hardware						
Printer Maintenance User Owned	Hardware						
File Space (100GB)	Hardware						
Package Software - Acquisition (BMS)	Software	95,560.00	96,515.60	97,480.76	98,455.56	99,440.12	100,434.52
Package Software - Maintenance	Software						
Business Objects Access	Software						
Term Emulation SFTW-Acquisition	Software						
Term Emulation SFTW-Maintenance	Software						
Server - Acquisition/Upgrade	Infrastructure						

Oakland County -- BOC Tech Assessment Program
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Server - Maintenance	Infrastructure						
Server Sftwre - Acquisition/Upgrade	Infrastructure						
Server Sftwre - Maintenance	Infrastructure						
Server Rack Mount	Infrastructure						
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure						
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure						

Oakland County -- BOC Tech Assessment Program
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						
SSL Certificate	Infrastructure						
Internet Access	Infrastructure						
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure						
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure						
Database (5 GB) on Consolidated SQL Instance Server	Infrastructure						
Database Instance (125 GB DB) on Consolidated SQL Server	Infrastructure						
Database SQL Maint Server	Infrastructure						
Database SQL Server Physical	Infrastructure						
DB Maintenance (Annual Cycle \$610)	Infrastructure						
DB Maintenance (Semi-Annual Cycle \$1220)	Infrastructure						
DB Maintenance (Semi-Annual Cycle \$2440)	Infrastructure						
Dedicated Virtual Server	Infrastructure						
DB Instance Setup	Infrastructure						

Oakland County -- BOC Tech Assessment Program
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
DBA MS SQL Database Creation on Existing Instance	Infrastructure						
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$601 On Premise Physical Server = N/A	Infrastructure						
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$9,288	Infrastructure						
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$9,751	Infrastructure						
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$3,167 On Premise Physical Server = \$10,446	Infrastructure						
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$12,906	Infrastructure						

Oakland County -- BOC Tech Assessment Program

Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Development Services:							
IT Hours - New Development	494,340						494,340
IT Hours - System Maintenance							
IT Hours - Customer Support		6,666	6,733	6,800	6,868	6,937	34,003
IT Hours - Planned Maintenance		3,333	3,366	3,400	3,434	3,468	17,002
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services (Video set up and intial meeting assistance - 3)	1,580						1,580
Contractor Professional Services (Video Production System Upgrades)	9,680						9,680
Contractor Professional Services (Display Installation)	3,504						3,504
Contractor Professional Services (Committee Room Upgrades)	22,650						22,650
Contractor Professional Services (BMS Installation and training)	26,925						26,925
<i>Development Services Subtotal:</i>	558,679	9,999	10,099	10,200	10,302	10,405	609,684
Hardware:							
Video System 3-Year Warranty	2,446						2,446
Video PC Acquisition	2,076						2,076
Video Production System Upgrades	30,355						30,355
Display Equipment	3,840						3,840
<i>Hardware Subtotal:</i>	38,718						38,718
Software:							
Package Software - Acquisition (BMS)	95,560	96,516	97,481	98,456	99,440	100,435	587,887
<i>Software Subtotal:</i>	95,560	96,516	97,481	98,456	99,440	100,435	587,887
Infrastructure:							
Video Equipment	30,355						30,355
Committee Room Upgrades	53,602						53,602

Oakland County -- BOC Tech Assessment Program
Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
<i>Infrastructure Subtotal</i>	83,958						83,958
Training:							
<i>Training Subtotal:</i>							
Other:							
<i>Other Subtotal:</i>							
Costs Total:	776,915	106,515	107,580	108,656	109,742	110,840	1,320,247

Oakland County -- BOC Tech Assessment Program
Return on Investment Analysis

Assumptions

Date	Assumption Description
22-Jul-20	Laserfische integration required for document archival and retrieval
22-Jul-20	Closed Captioning required for webcasting
22-Jul-20	Current BOC committee meeting room equipment requires updating
22-Jul-20	Video equipment estimate based on quote provided by Third Coast.
22-Jul-20	Board Mgmt software estimate based on estimate from eScribe