

Oakland County Department of Information Technology Project Scope and Approach

Project Name: Board of Commissioners Reapportionment

Project ID:DJ05110P

Leadership Group: Finance/Admin					
Department: Board of Commissioners			Division: BOC		
Project Sponsor: Patti Dib		Date Requested: 07/2/21		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: Susan Moore					
Account Number:	17020	Account Description:	IT-Application Services	Customer Name:	Board of Commissioners
Grant Funded?		Yes <u>No</u>	Mandate? Yes <u>No</u>		
			Mandate Source:		

Project Goal

To implement a dedicated solution to be used by the County Apportionment Commission so that the Board of Commissioner boundaries can be redrawn efficiently and accurately using the 2020 US Census data.

Business Objective

To provide a solution for the County Apportionment Commission to efficiently and accurately redraw the Board of Commissioner boundaries using 2020 US Census data.

To provide 2 to 3 web-based applications for the public to view the proposed Board of Commissioner boundaries.

Major Deliverables

- Detailed Project Plan
- Software Procurement
- Application Requirements
- Web-based GIS applications
- End User Software Documentation
- Training Plan
- Training/User Manual(s)

Approach

- Develop Detailed Project Plan
- Order software

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

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Project ID:DJ0511OP

- Develop Implementation Plan
- Develop new system
- Develop User Acceptance Test Plan
- Test new system
- Acquire User Acceptance Sign off
- Develop User Documentation
- Train users on new system
- Release new applications into production

Research & Analysis

Gartner Research Recommendation

Research Conducted – Nothing Found.

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users	10
Divisions	Board of Commissioners
Leadership Groups	Finance/Admin

Risk

Business Environment	Low – little or no impact to existing business processes.
Technical Environment	Medium – previously implemented technologies, 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:	Patti Dib	As Needed

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Facilities

-
-

Technical

- No hardware will need to be purchased for this process.
- The software solution for the Ad Hoc Reapportionment Committee has been selected prior to this project starting. The software is only needed for a single year.
- 7 licenses of the software solution will be needed.
- The public will not have the ability to draw their own boundaries using County-provided software.

Funding

- The Charge Code on the project is an IT charge code, though the project is a BOC project. This is because the funds for the project will be transferred from the General Fund to the IT budget, per the June 30th full Board meeting (MR #21286).

Other

-

Priority

Constraints

-
-

Exclusions

-
-

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PROJECT PHASE AUTHORIZATION

Phase(s): All phases	
Total Estimated Application Services	Hours:
Total Estimated Technical Systems	Hours:
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: Cost:

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PROJECT COMPLETION AUTHORIZATION

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

Board of Commissioners Reapportionment - Size Estimate (+/- 10% to 50%)

1	Type	ID	Task Name	Estimated
2				Hours
3		000000	PROJECT MANAGEMENT	123
4	Phase	100000	DEVELOP RFP & SELECT VENDOR	21
5	Phase	200000	DEFINE BUSINESS REQUIREMENTS	33
6	Phase	400000	IMPLEMENT VENDOR APPLICATION	162
7	Phase	500000	IMPLEMENTATION PHASE	35
8	Phase	600000	POST IMPLEMENTATION SUPPORT	11
9				385

Oakland County -- Board of Commissioners Reapportionment
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:	63,525	0	0	0	0	0	63,525
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	31,500	0	0	0	0	0	31,500
Infrastructure Subtotal:	0	0	0	0	0	0	0
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	95,025	0	0	0	0	0	95,025
Annual Return on Investment	(95,025)						(95,025)
Annual Costs/Savings Ratio	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	95,025	95,025	95,025	95,025	95,025	95,025	95,025
Cumulative Return on Investment	(95,025)	(95,025)	(95,025)	(95,025)	(95,025)	(95,025)	(95,025)
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 -- Board of Commissioners Reapportionment

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
Simplify redistricting process for the County Reapportionment Commission	Intangible Benefit					0	
Reports generated by selected software will help ensure all legal requirements are met, helping to protect the integrity of the process.	Intangible Benefit					0	
Public transparency is improved by providing plans on a public web site.	Intangible Benefit					0	
Reapportionment is a State mandated requirement.	Intangible Benefit					0	
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Oakland County -- Board of Commissioners Reapportionment 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
Simplify redistricting process for the County Reapportionment Commission	Intangible Benefit												
Reports generated by selected software will help ensure all legal requirements are met, helping to protect the integrity of the process.	Intangible Benefit												
Public transparency is improved by providing plans on a public web site.	Intangible Benefit												
Reapportionment is a State mandated requirement.	Intangible Benefit												

Oakland County -- Board of Commissioners Reapportionment

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:							
Simplify redistricting process for the County Reapportionment Commission							
Reports generated by selected software will help ensure all legal requirements are met, helping to protect the integrity of the process.							
Public transparency is improved by providing plans on a public web site.							
Reapportionment is a State mandated requirement.							
Savings Total:							

Oakland County -- Board of Commissioners Reapportionment

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	
								Y1	Y2	Y3	Y4	Y5	Y6		
IT Hours - New Development	Development Svcs		HR	385	165	63,525		X							63,525.00
IT Hours - System Maintenance	Development Svcs		HR		165	0									
IT Hours - Customer Support	Development Svcs		HR		165	0	1.010		X	X	X	X	X		
IT Hours - Planned Maintenance	Development Svcs		HR		165	0	1.010		X	X	X	X	X		
User Hours - New Development	Development Svcs					0									
User Hours - PTNE/OT	Development Svcs					0									
Contractor Professional Services	Development Svcs					0									
PC System - Acquisition	Hardware				687	0									
PC System - Maintenance	Hardware				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	Software		EA	7	4,500	31,500		X							31,500.00
Package Software - Maintenance	Software		EA			0	1.010		X	X	X	X	X		
Business Objects Access	Software					0									
Term Emulation SFTW-Acquisition	Software					0									
Term Emulation SFTW-Maintenance	Software					0									
Server - Acquisition/Upgrade	Infrastructure				8,000	0									
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 Software Purchase - Per Processor (4 Cores) - Requires Annual Support Below	Infrastructure				42,280	0									
Oracle Enterprise Software Support - Per Processor (4 Cores)	Infrastructure				9,293	0	1.030								
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure				16,985	0									

Oakland County -- Board of Commissioners Reapportionment

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	Y1	
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure				12,724	0									
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure				8,463	0									
SQL Server Enterprise - Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure				4,261	0									
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure				4,429	0									
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure				3,317	0									
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure				2,205	0									
SQL Server - Standard Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure				1,112	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									

Oakland County -- Board of Commissioners Reapportionment

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
								Y1	Y2	Y3	Y4	Y5	Y6	
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								
Dedicated Virtual Server	Infrastructure		ANN		4,150	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 -- Board of Commissioners Reapportionment

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions				
		Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs					
IT Hours - System Maintenance	Development Svcs					
IT Hours - Customer Support	Development Svcs	0.00	0.00	0.00	0.00	0.00
IT Hours - Planned Maintenance	Development Svcs	0.00	0.00	0.00	0.00	0.00
User Hours - New Development	Development Svcs					
User Hours - PTNE/OT	Development Svcs					
Contractor Professional Services	Development Svcs					
PC System - Acquisition	Hardware					
PC System - Maintenance	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	Software					
Package Software - Maintenance	Software	0.00	0.00	0.00	0.00	0.00
Business Objects Access	Software					
Term Emulation SFTW-Acquisition	Software					
Term Emulation SFTW-Maintenance	Software					
Server - Acquisition/Upgrade	Infrastructure					
Server - Maintenance	Infrastructure					
Server Sftwre - Acquisition/Upgrade	Infrastructure					
Server Sftwre - Maintenance	Infrastructure					
Server Rack Mount	Infrastructure					
Oracle Enterprise Software Purchase - Per Processor (4 Cores) - Requires Annual Support Below	Infrastructure					
Oracle Enterprise Software Support - Per Processor (4 Cores)	Infrastructure					
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure					

Oakland County -- Board of Commissioners Reapportionment

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions				
		Y2	Y3	Y4	Y5	Y6
SQL Server Enterprise Software						
Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure					
SQL Server Enterprise Software						
Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure					
SQL Server Enterprise - Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure					
SQL Server Standard Software						
Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure					
SQL Server Standard Software						
Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure					
SQL Server Standard Software						
Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure					
SQL Server - Standard Support, Per Processor (4 cores) - Sept 2022 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					

Oakland County -- Board of Commissioners Reapportionment

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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions				
		Y2	Y3	Y4	Y5	Y6
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					
Dedicated Virtual Server	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 -- Board of Commissioners Reapportionment
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	63,525						63,525
IT Hours - System Maintenance							
IT Hours - Customer Support		0	0	0	0	0	
IT Hours - Planned Maintenance		0	0	0	0	0	
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
<i>Development Services Subtotal:</i>	63,525						63,525
Hardware:							
<i>Hardware Subtotal:</i>							
Software:							
Package Software - Acquisition	31,500						31,500
Package Software - Maintenance		0	0	0	0	0	
<i>Software Subtotal:</i>	31,500						31,500
Infrastructure:							
<i>Infrastructure Subtotal</i>							
Training:							
<i>Training Subtotal:</i>							
Other:							
<i>Other Subtotal:</i>							
Costs Total:	95,025						95,025

Return on Investment Analysis

Assumptions

Date	Assumption Description
7/2/2021	No new infrastructure will be required. No new databases or servers required.
7/2/2021	Software purchased will be the Esri Online Redistricting Solution (\$4,500/named user)
7/2/2021	Only 5 Commissioners will actually be working within the software, plus 1 license for ROD staff, and 1 license for IT staff for a total of \$31,500 in licensing costs.
7/2/2021	License is an annual fee.
7/2/2021	License is only needed for one year (rolling 12-month period).
7/2/2021	Any web pages created to share new maps/apps will be created by either the BOC or Register of Deeds public website content editor.
7/2/2021	The public will not be drawing their own proposed districts using any Oakland County-purchased software.
7/2/2021	Only County employees will require a license for the software
7/2/2021	No Request for Proposal (RFP) will be required to procure the software
7/2/2021	The users will not need new/different hardware for this process.