

Oakland County Department of Information Technology Project Scope and Approach

Project Name: Clear Rewrite – Device Independent Program

Project ID: DF1183CR

Leadership Group: CLEMIS			
Department: Information Technology		Division: CLEMIS	
Project Sponsor: Jeff Nesmith	Date Requested: 5/13/20	PM Customer No. 183	
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: Public Safety Applications		IT Team No: F	
Project Manager/Leader: Brian Smith / Deb Nolen			
Account Number: 63500	Account Description: CLEMIS Fund	Customer Name:	CLEMIS
Grant Funded? Yes <u>No</u>	Mandate? Yes <u>No</u>	Mandate Source:	

Project Goal

To rewrite the current case management suite of applications so that application can run on multiple platforms and be device agnostic.

Business Objective

This will provide CLEMIS agencies a comprehensive case management system that is device agnostic, reliable and an efficient reporting tool so that they will be able to improve planning and responses to better serve the public safety needs.

Major Deliverables

- Detailed Project Plan with WBS
- Business Requirements Documents
- Proof of Concept
- Functional testing
- Implementation Plan
- Training/User Manual
- Service Level Agreement
- Disaster Recovery Toolkit
- Service Center Knowledge Documents
- Rewrite Application

Approach

- Develop Detailed Project Plan
- Document system requirements
- Create Proof of Concept
- Assess User Hardware and Software Requirements
- Conduct Tech Review
- Develop Implementation Plan
- Develop new system

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- 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

Nothing found

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users	5000+ users
Divisions	CLEMIS
Leadership Groups	CLEMIS

Risk

Business Environment Medium - Project will require some changes to existing business processes.

Technical Environment Low - Proven and previously implemented technologies

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:	Jeff Nesmith	As Needed

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Facilities

-
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Technical

- This project will be developed in phased approaches.
- The integrations to the following applications to be included in the re-write: CRASH, CLEAR, Citations, Evidence & Property, Activity Log, Online Citizen Reporting (OCPRS), CLEMIS Search, OakVideo, CFIRS, CAD MDC, and Auto Impound.

Funding

-

Other

- This is will span across multiple master plans.
- Coordination with the developers of the CAD system to ensure seamless integration between the systems

Priority TBD

Constraints

-
-

Exclusions

- Upgrades to the Data Base are not included in the estimation of this project.
-

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PROJECT PHASE AUTHORIZATION

Phase(s):	
Total Estimated Application Services	Hours:
Total Estimated Technical Systems	Hours: 70
Total Estimated CLEMIS	Hours: 4,614
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: 4,684	
Preliminary Estimated Development for Future	Hours:	
Grand Total Estimated Development	Hours: 4,684	Cost: \$772,860

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PROJECT COMPLETION AUTHORIZATION

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

Clear Rewrite - Device Independent Program - Size Estimate (+/- 10% to 50%)

1	Type	ID	Task Name	Estimated	Estimate Notes
2				Hours	
3	3	000000	CLEAR REWRITE - DEVICE INDEPDENAT PROGRAM	4,684	
4				4,684	

Oakland County -- Clear Rewrite – Device Independent 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:	772,860	321,453	3,063,551	334,440	2,373,076	347,951	7,213,331
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	0	0	0	0	0	0	0
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	772,860	321,453	3,063,551	334,440	2,373,076	347,951	7,213,331
Annual Return on Investment	(772,860)	(321,453)	(3,063,551)	(334,440)	(2,373,076)	(347,951)	(7,213,331)
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	772,860	1,094,313	4,157,864	4,492,304	6,865,380	7,213,331	7,213,331
Cumulative Return on Investment	(772,860)	(1,094,313)	(4,157,864)	(4,492,304)	(6,865,380)	(7,213,331)	(7,213,331)
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:	_____		

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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
Agencies will not be limited to only using one type of device in order to access the CLEMIS suite of applications.	Intangible Benefit					0	
Improve user experience by updating the front end application and using County standard code will improve reliability and efficiency	Intangible Benefit					0	
Improved security by developing using County standards and processes	Intangible Benefit					0	
Rewrite will will improve the applications ability to integrate seamlessly with the CLEMIS suite of applications and improve system performance	Intangible Benefit					0	
Increase CLEMIS member satisfaction by allowing the MDC users to be webbased and using mobile devices.	Intangible Benefit					0	
Rewrite applications using County standards allows CLEMIS to grow and to be relevant in the future.	Intangible Benefit					0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	

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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
Agencies will not be limited to only using one type of device in order to access the CLEMIS suite of applications.	Intangible Benefit												
Improve user experience by updating the front end application and using County standard code will improve reliability and efficiency	Intangible Benefit												
Improved security by developing using County standards and processes	Intangible Benefit												
Rewrite will will improve the applications ability to integrate seamlessly with the CLEMIS suite of applications and improve system performance	Intangible Benefit												
Increase CLEMIS member satisfaction by allowing the MDC users to be webbased and using mobile devices.	Intangible Benefit												
Rewrite applications using County standards allows CLEMIS to grow and to be relevant in the future.	Intangible Benefit												

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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:							
Agencies will not be limited to only using one type of device in order to access the CLEMIS suite of applications.							
Improve user experience by updating the front end application and using County standard code will improve reliability and efficiency							
Improved security by developing using County standards and processes							
Rewrite will will improve the applications ability to integrate seamlessly with the CLEMIS suite of applications and improve system performance							
Increase CLEMIS member satisfaction by allowing the MDC users to be webbased and using mobile devices.							
Rewrite applications using County standards allows CLEMIS to grow and to be relevant in the future.							
Savings Total:							

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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			4,684	165	772,860	1.020	x						
IT Hours - System Maintenance	Development Svcs			80	165	13,200	1.020		x	x	x	x	x	x
IT Hours - Customer Support	Development Svcs			1,750	165	288,750	1.020		x	x	x	x	x	x
IT Hours - Planned Maintenance	Development Svcs			80	165	13,200	1.020		x		x			x
IT Hours - New Development (2023-24 Master Plan)	Development Svcs			16,016	165	2,642,640	1.020			x				
IT Hours - New Development (2025-26 Master Plan)	Development Svcs			11,457	165	1,890,405	1.020						x	
User Hours - PTNE/OT	Development Svcs					0								
Contractor Professional Services	Development Svcs				70	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					0								
Package Software - Maintenance	Software					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								
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								

Oakland County -- Clear Rewrite – Device Independent 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	
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								
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								

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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		
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									
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									

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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		
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 -- Clear Rewrite – Device Independent 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	772,860.00					
IT Hours - System Maintenance	Development Svcs		13,464.00	13,733.28	14,007.95	14,288.10	14,573.87
IT Hours - Customer Support	Development Svcs		294,525.00	300,415.50	306,423.81	312,552.29	318,803.33
IT Hours - Planned Maintenance	Development Svcs		13,464.00		14,007.95		14,573.87
IT Hours - New Development (2023-24 Master Plan)	Development Svcs			2,749,402.66			
IT Hours - New Development (2025-26 Master Plan)	Development Svcs					2,046,235.17	
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						
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						

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Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
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						
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						

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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
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						
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						

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Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$12,906	Infrastructure						

Oakland County -- Clear Rewrite -- Device Independent 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	772,860						772,860
IT Hours - System Maintenance		13,464	13,733	14,008	14,288	14,574	70,067
IT Hours - Customer Support		294,525	300,416	306,424	312,552	318,803	1,532,720
IT Hours - Planned Maintenance		13,464		14,008		14,574	42,046
IT Hours - New Development (2023-24 Master Plan)			2,749,403				2,749,403
IT Hours - New Development (2025-26 Master Plan)					2,046,235		2,046,235
User Hours - PTNE/OT							
Contractor Professional Services							
<i>Development Services Subtotal:</i>	772,860	321,453	3,063,551	334,440	2,373,076	347,951	7,213,331
Hardware:							
<i>Hardware Subtotal:</i>							
Software:							
<i>Software Subtotal:</i>							
Infrastructure:							
<i>Infrastructure Subtotal</i>							
Training:							
<i>Training Subtotal:</i>							
Other:							
<i>Other Subtotal:</i>							
Costs Total:	772,860	321,453	3,063,551	334,440	2,373,076	347,951	7,213,331

