

Oakland County Department of Information Technology Project Scope and Approach

Project Name: Incident Notification System Rewrite

Project ID: DF1183IN

Leadership Group: CLEMIS			
Department: Information Technology		Division: CLEMIS	
Project Sponsor: Jeff Nesmith	Date Requested: 5/13/20	PM Customer No. 183	
Request Type:	<i>New Development</i>	<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 provide law enforcement officers with an alternate method for receiving CAD notifications so that officers can be more informed of the situation they are dispatched to.

Business Objective

To provide law enforcement officers with an alternate method of receiving CAD notification details. This would provide CLEMIS participating law enforcement agencies with a new method for receiving CAD notifications that allow them to control who receives incident notifications, to increase logging capabilities, and to add/revise information to better serve customers.

Major Deliverables

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

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Approach

- Develop Detailed Project Plans, as Needed
- Research CLEMIS agency notification requirements
- Design a solution that meets Oakland County IT standards,
- Develop a proof of concept incident notification solution that could be integrated into the CLEMIS product portfolio.
- Document Business Requirements
- Document Data Policy Changes
- Assess Hardware and Software Requirements
- Develop Implementation Plans
- Develop New Systems/Data
- Develop User Acceptance Test Plans
- Test New System/Data
- Develop User Training
- Develop User Documentation, SLA, Disaster Recovery Toolkit, Service Center Knowledge Documents
- Train/Notify Users of New System/Data
- Conduct Change Control
- Release New System/Data into Production

Research & Analysis

Gartner Research Recommendation

Nothing found

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users 7000+ users

Divisions CLEMIS

Leadership Groups CLEMIS

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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

Facilities

-
-

Technical

-
-

Funding

-

Other

-

Priority

- TBD

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Constraints

-
-

Exclusions

-
-

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PROJECT PHASE AUTHORIZATION

Phase(s):	
Total Estimated Application Services	Hours:
Total Estimated Technical Systems	Hours: 120
Total Estimated CLEMIS	Hours: 1,137
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: 1,257 Cost: \$207,405

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PROJECT COMPLETION AUTHORIZATION

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

Incident Notification System Rewrite - Size Estimate (+/- 10% to 50%)

Type	ID	Task Name	Estimated	Estimate Notes
			Hours	
3	000100	PROJECT MANAGEMENT	383	
4 Phase	200000	DEFINE BUSINESS REQUIREMENTS	224	
5 Phase	300000	DESIGN SYSTEM ARCHITECTURE	134	
6 Phase	500000	DEVELOP APPLICATION	431	
7 Phase	600000	IMPLEMENTATION PHASE	61	
8 Phase	800000	POST IMPLEMENTATION SUPPORT	24	
			1,257	

Oakland County -- Incident Notification System Rewrite

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:	207,405	16,500	9,900	16,500	9,900	16,500	276,705
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	40,000	40,800	41,616	42,448	43,297	44,163	252,325
Infrastructure Subtotal	38,328	39,095	39,876	40,674	41,487	42,317	241,778
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	285,733	96,395	91,392	99,622	94,685	102,980	770,807
Annual Return on Investment	(285,733)	(96,395)	(91,392)	(99,622)	(94,685)	(102,980)	(770,807)
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	285,733	382,128	473,520	573,142	667,827	770,807	770,807
Cumulative Return on Investment	(285,733)	(382,128)	(473,520)	(573,142)	(667,827)	(770,807)	(770,807)
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 -- Incident Notification System Rewrite
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			1,257	165	207,405	1.020	x							
IT Hours - System Maintenance	Development Svcs			20	165	3,300			x	x	x	x	x	x	
IT Hours - Customer Support	Development Svcs			40	165	6,600			x	x	x	x	x	x	
IT Hours - Planned Maintenance	Development Svcs			40	165	6,600			x		x			x	
User Hours - New Development	Development Svcs					0									
User Hours - PTNE/OT	Development Svcs					0									
CLEMIS New Development -Contractor Professional Services	Development Svcs				70	0	1.020								
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			1	40,000	40,000	1.020	x	x	x	x	x	x	x	
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			6	360	2,160	1.020	x	x	x	x	x	x	x	
Server Sftwre - Acquisition/Upgrade	Infrastructure			6	335	2,010	1.020	x	x	x	x	x	x	x	
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								

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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		
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			2	12,724	25,448	1.020	x	x	x	x	x	x		
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	2	951	1,902	1.020	x	x	x	x	x	x	x	
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$9,751	Infrastructure		ANN	4	1,702	6,808	1.020	x	x	x	x	x	x	x	
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 -- Incident Notification System Rewrite
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	207,405.00					
IT Hours - System Maintenance	Development Svcs		3,300.00	3,300.00	3,300.00	3,300.00	3,300.00
IT Hours - Customer Support	Development Svcs		6,600.00	6,600.00	6,600.00	6,600.00	6,600.00
IT Hours - Planned Maintenance	Development Svcs		6,600.00		6,600.00		6,600.00
User Hours - New Development	Development Svcs						
User Hours - PTNE/OT	Development Svcs						
CLEMIS New Development -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	40,000.00	40,800.00	41,616.00	42,448.32	43,297.29	44,163.23
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	2,160.00	2,203.20	2,247.26	2,292.21	2,338.05	2,384.81
Server Sftwre - Acquisition/Upgrade	Infrastructure	2,010.00	2,050.20	2,091.20	2,133.03	2,175.69	2,219.20
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						

Oakland County -- Incident Notification System Rewrite
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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
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	25,448.00	25,956.96	26,476.10	27,005.62	27,545.73	28,096.65
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						

Oakland County -- Incident Notification System Rewrite
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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	1,902.00	1,940.04	1,978.84	2,018.42	2,058.79	2,099.96
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$9,751	Infrastructure	6,808.00	6,944.16	7,083.04	7,224.70	7,369.20	7,516.58
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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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 -- Incident Notification System Rewrite

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	207,405						207,405
IT Hours - System Maintenance		3,300	3,300	3,300	3,300	3,300	16,500
IT Hours - Customer Support		6,600	6,600	6,600	6,600	6,600	33,000
IT Hours - Planned Maintenance		6,600		6,600		6,600	19,800
User Hours - New Development							
User Hours - PTNE/OT							
CLEMIS New Development -Contractor Professional Services							
<i>Development Services Subtotal:</i>	207,405	16,500	9,900	16,500	9,900	16,500	276,705
Hardware:							
<i>Hardware Subtotal:</i>							
Software:							
Package Software - Acquisition	40,000	40,800	41,616	42,448	43,297	44,163	252,325
<i>Software Subtotal:</i>	40,000	40,800	41,616	42,448	43,297	44,163	252,325
Infrastructure:							
Server - Maintenance	2,160	2,203	2,247	2,292	2,338	2,385	13,626
Server Sftwre - Maintenance	2,010	2,050	2,091	2,133	2,176	2,219	12,679
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	25,448	25,957	26,476	27,006	27,546	28,097	160,529
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$9,288	1,902	1,940	1,979	2,018	2,059	2,100	11,998

Oakland County -- Incident Notification System Rewrite

Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$9,751	6,808	6,944	7,083	7,225	7,369	7,517	42,946
<i>Infrastructure Subtotal</i>	38,328	39,095	39,876	40,674	41,487	42,317	241,778
Training:							
<i>Training Subtotal:</i>							
Other:							
<i>Other Subtotal:</i>							
Costs Total:	285,733	96,395	91,392	99,622	94,685	102,980	770,807

