

# Oakland County Department of Information Technology Project Scope and Approach

**Project Name:** CLEMIS Admin Application

**Project ID:** DF1183AA

<b>Leadership Group:</b> CLEMIS			
<b>Department:</b> Information Technology		<b>Division:</b> CLEMIS	
<b>Project Sponsor:</b> Jeff Nesmith	<b>Date Requested:</b> 6/12/20	<b>PM Customer No.</b> 183	
<b>Request Type:</b>	<u><i>New Development</i></u>	<i>Enhancement</i>	<i>Customer Support</i>
	<i>Planned System Maintenance or Upgrade</i>		
<b>IT Team Name:</b> Public Safety Applications		<b>IT Team No:</b> F	
<b>Project Manager/Leader:</b> Brian Smith / Deb Nolen			
<b>Account Number:</b> 63500	<b>Account Description:</b> CLEMIS Fund	<b>Customer Name:</b>	CLEMIS
<b>Grant Funded?</b> Yes <u>No</u>	<b>Mandate?</b> Yes <u>No</u>	<b>Mandate Source:</b>	

## Project Goal

To develop and implement a new CLEMIS Agency Administration application so that the current application can be upgraded and rewritten to utilize newer technologies to be robust, scalable, and to meet the needs of CLEMIS administration.

## Business Objective

Improve user productivity and efficiency by implementing an administration application that can manage all agency and user accounts in a robust database. This will replace the current manual process and have improved reporting and billing capabilities.

### **Major Deliverables**

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

### **Approach**

- Integrated new application with other CLEMIS products and applications
- Rewrite the Current Billing Application
- Develop Detailed Project Plan
- Document system requirements

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- Assess User Hardware and Software Requirements
- Conduct Tech Review
- 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**

Nothing found

## **Benefits**

***See Return on Investment (ROI) Analysis Document***

## **Impact**

**Number of Users**                      CLEMIS Admin: < 20

**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

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**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:

<b><u>Role:</u></b>	<b><u>Name</u></b>	<b><u>Hours per Day</u></b>
Project Sponsor:	Jeff Nesmith	As Needed

**Facilities**

- 

**Technical**

- 

**Funding**

- 

**Other**

- Coordination with the developers of the CAD system to ensure seamless integration between the systems
- 

**Priority** 10

**Constraints**

- 
- 

**Exclusions**

- 
-

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**PROJECT PHASE AUTHORIZATION**

<b>Phase(s):</b>	
<b>Total Estimated Application Services</b>	<b>Hours:</b>
<b>Total Estimated Technical Systems</b>	<b>Hours: 33</b>
<b>Total Estimated CLEMIS</b>	<b>Hours: 2056</b>
<b>Total Estimated Internal Services</b>	<b>Hours:</b>
<b>IT Application Services Division Manager Approval:</b>	<b>Date:</b>
<b>IT Technical Systems Division Manager Approval:</b>	<b>Date:</b>
<b>IT CLEMIS Division Manager Approval:</b>	<b>Date:</b>
<b>IT Internal Services Division Manager Approval:</b>	<b>Date:</b>
<b>IT Management Approval:</b>	
Approved:                      Yes                      No	<b>Date:</b>
Reason:	
<b>Project Sponsor Approval:</b>	
Title:	<b>Date:</b>

**PROJECT SUMMARY**

<b>Authorized Development (see above)</b>	<b>Hours:</b>
<b>Preliminary Estimated Development for Future Phases</b>	<b>Hours:</b>
<b>Grand Total Estimated Development</b>	<b>Hours: 2,089                      Cost: \$344,685</b>

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## PROJECT COMPLETION AUTHORIZATION

<b>Customer Acceptance of Product:</b>	
Title:	Date:
<b>Project Office Review:</b>	Date:

### CLEMIS Admin Application - Size Estimate (+/- 10% to 50%)

1	2	3	4	5
Type	ID	Task Name	Estimated	Estimate Notes
			Hours	
3	000000	PROJECT MANAGEMENT	591	
4	Phase 200000	DEFINE BUSINESS REQUIREMENTS	382	
5	Phase 300000	DESIGN SYSTEM ARCHITECTURE	239	
6	Phase 500000	DEVELOP APPLICATION	663	
7	Phase 600000	IMPLEMENTATION PHASE	166	
8	Phase 800000	POST IMPLEMENTATION SUPPORT	48	
9			2,089	

**Oakland County -- CLEMIS Admin Application**

Return on Investment Analysis

Project Summary

Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
<b>Benefits/Savings:</b>							
Tangible Benefits Subtotal:	0	0	0	0	0	0	0
Cost Avoidance Subtotal:	17,820	18,176	18,540	18,911	19,289	19,675	112,411
<b>Costs:</b>							
Development Services Subtotal:	344,685	16,500	9,900	16,500	9,900	16,500	413,985
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	0	0	0	0	0	0	0
Infrastructure Subtotal	32,032	32,032	32,032	32,032	32,032	28,228	188,388
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
<b>Annual Statistics:</b>							
Annual Total Savings	17,820	18,176	18,540	18,911	19,289	19,675	112,411
Annual Total Costs	376,717	48,532	41,932	48,532	41,932	44,728	602,373
Annual Return on Investment	(358,897)	(30,356)	(23,392)	(29,621)	(22,643)	(25,053)	(489,962)
Annual Costs/Savings Ratio	2114.01%	267.01%	226.17%	256.64%	217.39%	227.34%	
<b>Project Cumulative Statistics:</b>							
Cumulative Total Savings	17,820	35,996	54,536	73,447	92,736	112,411	112,411
Cumulative Total Costs	376,717	425,249	467,181	515,713	557,645	602,373	602,373
Cumulative Return on Investment	(358,897)	(389,253)	(412,645)	(442,266)	(464,909)	(489,962)	(489,962)
Cumulative Cost/Savings Ratio	2114.01%	1181.37%	856.64%	702.16%	601.33%	535.87%	535.87%
Year Positive Payback Achieved State or Federal Mandate?							NO PAYBACK
<b>Signatures:</b>							
Benefits Reviewed By Project Sponsor	_____			Date:	_____		
Costs (including IT Resources) Reviewed By Information Technology Project Manager	_____			Date:	_____		







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Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
<b>Tangible Benefit:</b>							
<i>Tangible Benefits Subtotal:</i>							
<b>Cost Avoidance:</b>							
Automating the workflow process will save office staff an estimated 5 hours per month.	9,900	10,098	10,300	10,506	10,716	10,930	62,450
Improved user support by providing more accurate billing information will reduce user support calls regarding billing.	7,920	8,078	8,240	8,405	8,573	8,744	49,960
<i>Cost Avoidance Subtotal:</i>	<b>17,820</b>	<b>18,176</b>	<b>18,540</b>	<b>18,911</b>	<b>19,289</b>	<b>19,675</b>	<b>112,411</b>
<b>Intangible Benefit:</b>							
Upgraded technology will reduce the security risk of unsupported software							
Improved reporting capabilities will reduce customer time.							
Upgraded application will meet the current IT standards							
<b>Savings Total:</b>	<b>17,820</b>	<b>18,176</b>	<b>18,540</b>	<b>18,911</b>	<b>19,289</b>	<b>19,675</b>	<b>112,411</b>

## Oakland County -- CLEMIS Admin Application

## 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			2,089	165	344,685		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					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			4	360	1,440		x	x	x	x	x	x	x	
Server Sftwre - Acquisition/Upgrade	Infrastructure			4	335	1,340		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		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	4	951	3,804		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			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									

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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs	344,685.00					
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						
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	1,440.00	1,440.00	1,440.00	1,440.00	1,440.00	1,440.00
Server Sftwre - Acquisition/Upgrade	Infrastructure	1,340.00	1,340.00	1,340.00	1,340.00	1,340.00	1,340.00
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						

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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	25,448.00	25,448.00	25,448.00	25,448.00	25,448.00
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 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	3,804.00	3,804.00	3,804.00	3,804.00	3,804.00	
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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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						

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Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
<b>Development Services:</b>							
IT Hours - New Development	344,685						344,685
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>	<b>344,685</b>	<b>16,500</b>	<b>9,900</b>	<b>16,500</b>	<b>9,900</b>	<b>16,500</b>	<b>413,985</b>
<b>Hardware:</b>							
<i>Hardware Subtotal:</i>							
<b>Software:</b>							
<i>Software Subtotal:</i>							
<b>Infrastructure:</b>							
Server - Maintenance	1,440	1,440	1,440	1,440	1,440	1,440	8,640
Server Sftwre - Maintenance	1,340	1,340	1,340	1,340	1,340	1,340	8,040
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	25,448	25,448	25,448	25,448	25,448	25,448	152,688
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$9,288	3,804	3,804	3,804	3,804	3,804		19,020

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Cost Summary

<b>Cost Description</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>	<b>Total</b>
<i>Infrastructure Subtotal</i>	<b>32,032</b>	<b>32,032</b>	<b>32,032</b>	<b>32,032</b>	<b>32,032</b>	<b>28,228</b>	<b>188,388</b>
<b>Training:</b>							
<i>Training Subtotal:</i>							
<b>Other:</b>							
<i>Other Subtotal:</i>							
<b>Costs Total:</b>	<b>376,717</b>	<b>48,532</b>	<b>41,932</b>	<b>48,532</b>	<b>41,932</b>	<b>44,728</b>	<b>602,373</b>

