

Oakland County Department of Information Technology Project Scope and Approach

Project Name: CLEMIS Mugshot RFP

Project ID: D41183FR

Leadership Group: CLEMIS			
Department: IT		Division: CLEMIS	
Project Sponsor: Jeff Nesmith	Date Requested: 05/15/2020	PM Customer No. 183	
Request Type: <i>New Development</i>			
IT Team Name: CLEMIS Bio Metrics		IT Team No: 4	
Project Manager/Leader: Brian Smith			
Account Number: 63500	Account Description: CLEMIS Fund	Customer Name: CLEMIS	
Grant Funded? No	Mandate? No	Mandate Source:	

Project Goal

To replace the current mugshot application and upgrade the current facial recognition application so that the technology is up-to-date and to reduce software and maintenance fees.

Business Objective

The purpose of this program is to identify the best and most cost-effective way to upgrade the CLEMIS mugshot and facial recognition service offerings and then to create the necessary plans to obtain, install and migrate to the upgraded product. Among the options that will be considered are using the existing vendor's higher-end product, finding another vendor and possibly obtaining the service from the Michigan State Police.

Major Deliverables

- Evaluate the existing Facial Recognition solution
- Evaluate the State of Michigan solution
- Recommendation for solution(s)
- RFP for Mugshot Application
- Implement a New Mugshot Application
- 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

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Approach

- Identify features and functionality in existing Facial Recognition solution.
- Identify features and functionality in the Michigan State Police solution.
- One or more plans will be developed as necessary to acquire, install and implement, integrate the approved solution(s).
- Develop Detailed Project Plans, as Needed
- Review Current Business Processes
- 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 - Research Conducted: Nothing Found

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users 7,000+ 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

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:	Jeffrey Nesmith	As-needed

Facilities

-

Technical

-

Funding

-

Other

-

Priority

- TBD

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Constraints

-

Exclusions

-

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PROJECT PHASE AUTHORIZATION

Phase(s): Project Management and Facial Recognition Research	
Total Estimated Application Services	Hours:
Total Estimated Technical Systems	Hours: 69
Total Estimated CLEMIS	Hours: 1,417
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: 1,486 Cost: \$245,190

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PROJECT COMPLETION AUTHORIZATION

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

CLEMIS Mugshot RFP - Size Estimate (+/- 10% to 50%)

1	Type	ID	Task Name	Estimated	Estimate Notes
2				Hours	
3		000000	PROJECT MANAGEMENT	467	
4	Phase	200000	DEFINE BUSINESS REQUIREMENTS	160	
5	Phase	300000	DESIGN SYSTEM ARCHITECTURE	96	
6	Phase	500000	DEVELOP APPLICATION	445	
7	Phase	600000	IMPLEMENTATION PHASE	246	
8	Phase	800000	POST IMPLEMENTATION SUPPORT	72	
9				1,486	

Oakland County -- CLEMIS Mugshot RFP

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:	260,000	260,000	260,000	260,000	260,000	260,000	1,560,000
Costs:							
Development Services Subtotal:	245,190	30,294	24,033	31,518	25,004	32,791	388,831
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	260,000	260,000	260,000	260,000	260,000	260,000	1,560,000
Annual Total Costs	245,190	30,294	24,033	31,518	25,004	32,791	388,831
Annual Return on Investment	14,810	229,706	235,967	228,482	234,996	227,209	1,171,169
Annual Costs/Savings Ratio	94.30%	11.65%	9.24%	12.12%	9.62%	12.61%	
Project Cumulative Statistics:							
Cumulative Total Savings	260,000	520,000	780,000	1,040,000	1,300,000	1,560,000	1,560,000
Cumulative Total Costs	245,190	275,484	299,517	331,035	356,039	388,831	388,831
Cumulative Return on Investment	14,810	244,516	480,483	708,965	943,961	1,171,169	1,171,169
Cumulative Cost/Savings Ratio	94.30%	52.98%	38.40%	31.83%	27.39%	24.93%	24.93%
Year Positive Payback Achieved	Year 1						Year 1
State or Federal Mandate?							
Signatures:							
Benefits Reviewed By Project Sponsor	_____			Date:	_____		
Costs (including IT Resources) Reviewed By Information Technology Project Manager	_____			Date:	_____		

Oakland County -- CLEMIS Mugshot RFP

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
Add a new tool to the law enforcement toolkit. The current system isn't very usable unless you have a mugshot quality picture. Typical static or surveillance photos aren't good enough. The new systems now can recognize faces from live camera feeds or static photos, as low as 24 pixels between the eyes.	Intangible Benefit	CLEMIS BIO Metrics				0	
Since the existing bio facial system can't use surveillance or static photos unless they are high quality, the benefit of a new system would greatly reduce the time for officers to identify persons of interest. Typically would take 2 days/16 hours knocking on doors, create a list of suspects, draw a sketch, validate the facial identify the perpetrator.	Intangible Benefit	CLEMIS Bio Metrics Average time to identify suspect(s) reduced from 16 hours to 2 hours if a photo is available to scan into a BioFacial system. Cost benefit is 14 hours X \$30 hourly rate = \$420 per image of a suspect created. There are no stats because no one uses this module. We'll assume 10 mugshot photos would be analyzed a month. \$420 x 10 per month X 12 months = \$50,400.	ANN	0	0	0	

Oakland County -- CLEMIS Mugshot RFP
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
Reduce the time to solve a crime. Currently all photos are sent to the State of Michigan for advanced scanning enhancement. The turnaround time can be between 2 weeks and 2 months. The higher severity the crime determines the place in the wait queue. Not all communities have the same priorities on various crimes, if we include in this project additional admin level licenses so agencies could enhance photos themselves, then we could reduce queue wait times.	Intangible Benefit					0	
If we go with a new product we will save \$260,000 in yearly maintenance fees to the vendor. (NOTE: We don't know the cost of a replacement product at this time; however, estimating to be \$150,000).	Cost Avoidance	\$230,000/2= \$115,000. We don't yet know what the yearly maintenance fee would be on the prospective replacement product.		1	260,000	260,000	

Oakland County -- CLEMIS Mugshot RFP
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	
Add a new tool to the law enforcement toolkit. The current system isn't very usable unless you have a mugshot quality picture. Typical static or surveillance photos aren't good enough. The new systems now can recognize faces from live camera feeds or static photos, as low as 24 pixels between the eyes.	Intangible Benefit													
Since the existing bio facial system can't use surveillance or static photos unless they are high quality, the benefit of a new system would greatly reduce the time for officers to identify persons of interest. Typically would take 2 days/16 hours knocking on doors, create a list of suspects, draw a sketch, validate the facial identify the perpetrator.	Intangible Benefit													

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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	
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If we go with a new product we will save \$260,000 in yearly maintenance fees to the vendor. (NOTE: We don't know the cost of a replacement product at this time; however, estimating to be \$150,000).	Cost Avoidance	x	x	x	x	x	x	260,000.00	260,000.00	260,000.00	260,000.00	260,000.00	260,000.00	260,000.00

Oakland County -- CLEMIS Mugshot RFP
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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:							
If we go with a new product we will save \$260,000 in yearly maintenance fees to the vendor. (NOTE: We don't know the cost of a replacement product at this time; however, estimating to be \$150,000).	260,000	260,000	260,000	260,000	260,000	260,000	1,560,000
<i>Cost Avoidance Subtotal:</i>	260,000	260,000	260,000	260,000	260,000	260,000	1,560,000
Intangible Benefit:							
Add a new tool to the law enforcement toolkit. The current system isn't very usable unless you have a mugshot quality picture. Typical static or surveillance photos aren't good enough. The new systems now can recognize faces from live camera feeds or static photos, as low as 24 pixels between the eyes.							
Since the existing bio facial system can't use surveillance or static photos unless they are high quality, the benefit of a new system would greatly reduce the time for officers to identify persons of interest. Typically would take 2 days/16 hours knocking on doors, create a list of suspects, draw a sketch, validate the facial identify the perpetrator.							

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Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Reduce the time to solve a crime. Currently all photos are sent to the State of Michigan for advanced scanning enhancement. The turnaround time can be between 2 weeks and 2 months. The higher severity the crime determines the place in the wait queue. Not all communities have the same priorities on various crimes, if we include in this project additional admin level licenses so agencies could enhance photos themselves, then we could reduce queue wait times.							
Savings Total:	260,000	260,000	260,000	260,000	260,000	260,000	1,560,000

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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		HR	1,486	165	245,190	1.020	x						
IT Hours - System Maintenance	Development Svcs			40	165	6,600	1.020		x	x	x	x	x	x
IT Hours - Customer Support	Development Svcs			100	165	16,500	1.020		x	x	x	x	x	x
IT Hours - Planned Maintenance	Development Svcs			40	165	6,600	1.020		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				814	0								
PC System - Maintenance	Hardware				2,304	0								
Notebook - Acquisition	Hardware				1,223	0								
Notebook - Maintenance	Hardware				2,372	0								
Tablet Notebook - Acquisition	Hardware				2,012	0								
Tablet Notebook - Maintenance	Hardware					0								
Laserprinter - Acquisition	Hardware				1,432	0								
Laserprinter - Maintenance	Hardware				1,104	0								
Image Workstations - Acquisition	Hardware					0								
Image Workstations - Maintenance	Hardware				3,496	0								
PC Maintenance User Owned	Hardware				2,304	0								
Printer Maintenance User Owned	Hardware				1,072	0								
Package Software - Acquisition	Software			1	150,000	150,000		x						
Package Software - Maintenance	Software			1	150,000	150,000	1.020		x	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			6	8,000	48,000		x						
Server - Maintenance	Infrastructure			6	360	2,160			x	x	x	x	x	x
Server Sftwre - Acquisition/Upgrade	Infrastructure				335	0								
Server Sftwre - Maintenance	Infrastructure					0								
Server Rack Mount	Infrastructure				400	0								
MS SQL Server Standard Per Processor - Includes Year 1 Maintenance	Infrastructure				4,725	0								
MS SQL Server Standard Per Processor - Year 2 and Beyond	Infrastructure				946	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	
MS SQL Server Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure			2	19,693	39,386		x						
MS SQL Server Enterprise Per Processor - Year 2 and Beyond	Infrastructure			2	3,939	7,878			x	x	x	x	x	x
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			1	180	180		x	x	x	x	x	x	x
Project Staff Training	Training					0								
User Training	Training					0								
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure		ANN	2	415	830		x	x	x	x	x	x	x
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								

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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	
File Space (100GB)	Hardware		ANN		173	0								
Internet Bandwidth per MB	Hardware		ANN		750	0								
DB Instance Setup	Infrastructure				976	0								
DBA MS SQL Database Creation on Existing Instance	Infrastructure				366	0								
DBA MS SQL Installation and Instance Creation (10hrs)	Infrastructure				1,220	0								
DBA MS SQL Instance Creation on Consolidated or Existing Server (8hrs)	Infrastructure				976	0								
Server Admin App Code Virtual Directory Setup (1hr)	Infrastructure				122	0								
Server Admin Install Physical Server / Install OS (12hrs)	Infrastructure				1,464	0								
Server Admin Virtual Machine Creation (5hrs)	Infrastructure				610	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	245,190.00					
IT Hours - System Maintenance	Development Svcs		6,732.00	6,866.64	7,003.97	7,144.05	7,286.93
IT Hours - Customer Support	Development Svcs		16,830.00	17,166.60	17,509.93	17,860.13	18,217.33
IT Hours - Planned Maintenance	Development Svcs		6,732.00		7,003.97		7,286.93
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						
Image Workstations - Acquisition	Hardware						
Image Workstations - Maintenance	Hardware						
PC Maintenance User Owned	Hardware						
Printer Maintenance User Owned	Hardware						
Package Software - Acquisition	Software	150,000.00					
Package Software - Maintenance	Software		153,000.00	156,060.00	159,181.20	162,364.82	165,612.12
Business Objects Access	Software						
Term Emulation SFTW-Acquisition	Software						
Term Emulation SFTW-Maintenance	Software						
Server - Acquisition/Upgrade	Infrastructure	48,000.00					
Server - Maintenance	Infrastructure		2,160.00	2,160.00	2,160.00	2,160.00	2,160.00
Server Sftwre - Acquisition/Upgrade	Infrastructure						
Server Sftwre - Maintenance	Infrastructure						
Server Rack Mount	Infrastructure						
MS SQL Server Standard Per Processor - Includes Year 1 Maintenance	Infrastructure						
MS SQL Server Standard Per Processor - Year 2 and Beyond	Infrastructure						

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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
MS SQL Server Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure	39,386.00					
MS SQL Server Enterprise Per Processor - Year 2 and Beyond	Infrastructure		7,878.00	7,878.00	7,878.00	7,878.00	7,878.00
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	180.00	180.00	180.00	180.00	180.00	180.00
Project Staff Training	Training						
User Training	Training						
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure	830.00	830.00	830.00	830.00	830.00	830.00
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						

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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
File Space (100GB)	Hardware						
Internet Bandwidth per MB	Hardware						
DB Instance Setup	Infrastructure						
DBA MS SQL Database Creation on Existing Instance	Infrastructure						
DBA MS SQL Installation and Instance Creation (10hrs)	Infrastructure						
DBA MS SQL Instance Creation on Consolidated or Existing Server (8hrs)	Infrastructure						
Server Admin App Code Virtual Directory Setup (1hr)	Infrastructure						
Server Admin Install Physical Server / Install OS (12hrs)	Infrastructure						
Server Admin Virtual Machine Creation (5hrs)	Infrastructure						

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Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Development Services:							
IT Hours - New Development	245,190						245,190
IT Hours - System Maintenance		6,732	6,867	7,004	7,144	7,287	35,034
IT Hours - Customer Support		16,830	17,167	17,510	17,860	18,217	87,584
IT Hours - Planned Maintenance		6,732		7,004		7,287	21,023
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
<i>Development Services Subtotal:</i>	245,190	30,294	24,033	31,518	25,004	32,791	388,831
Hardware:							
<i>Hardware Subtotal:</i>							
Software:							
<i>Software Subtotal:</i>							
Infrastructure:							
<i>Infrastructure Subtotal</i>							
Training:							
<i>Training Subtotal:</i>							
Other:							

Oakland County -- CLEMIS Mugshot RFP
Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
<i>Other Subtotal:</i>							
Costs Total:	245,190	30,294	24,033	31,518	25,004	32,791	388,831

