Project Name: New Mugshot Implementation Project ID: D43183FR

Leadership Group: CLEMIS											
Department: IT		Division: CLI	EMIS								
Project Sponsor: Jim Manning	Date Requeste	d: 06/09/22	PM Custom	tomer No. 183							
Request Type: New Development											
IT Team Name: FRMS - BIOMETRICS	APPS	IT Team No: 4	1								
Project Manager/Leader: Brian Smith											
Account 63500 Account Number: Description:	CLEMIS Fu	nd	Customer Name:	CLEMIS							
Grant Funded? No		ndate?	No								

#### **Project Goal**

To replace the current mugshot application and upgrade the current mugshot database 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 system and possible facial recognition service offerings and then to create the necessary plans to obtain, install and migrate to the upgraded product.

#### **Major Deliverables**

- Upgrade Mugshot Database
- Implement a New Mugshot Application with RFP vendor
- 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

#### **Approach**

- Identify features and functionality in existing Facial Recognition solution.
- Identify features and functionality required by the Michigan State Police.
- One or more plans will be developed as necessary to acquire, install and implement, integrate the approved solution(s).
- Analyze mugshot database to determine to upgrade or convert it.
- Develop Detailed Project Plans, as Needed

Project Name: New Mugshot Implementation Project ID: D43183FR

- 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

#### **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.

Project Name: New Mugshot Implementation Project ID: D43183FR

Assumptions
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**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:

Role: Name Hours per Day

Project Sponsor: Jim Manning As needed

#### **Facilities**

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#### Technical

• Assuming existing database needs to be upgraded or converted.

#### **Funding**

•

#### Other

•

**Priority** TBD

#### **Constraints**

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#### **Exclusions**

•

Project Name: New Mugshot Implementation Project ID: D43183FR

#### **PROJECT PHASE AUTHORIZATION**

Phase(s): All									
Total Estimated Application Services	Hours:								
Total Estimated Technical Systems	Hours: 118								
Total Estimated CLEMIS	Hours:								
Total Estimated Internal Services	Hours: 2,072								
IT Application Services Division Manager Approval:									
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:	Project Sponsor Approval:								
Title:		Date:							

#### PROJECT SUMMARY

Authorized Development (see above)	Hours: 2,190	
Preliminary Estimated Development for Future Phases	Hours:	
Grand Total Estimated Development	Hours: 2,190	Cost: \$361,350

Project Name: New Mugshot Implementation Project ID: D43183FR

#### PROJECT COMPLETION AUTHORIZATION

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

New Mugshot Implementation - Size Estimate (+/- 10% to 50%)

_1	Туре	ID	Task Name	Estimated
2				Hours
3	3	000000-0	PROJECT MANAGEMENT	546
4	Phase	100000	DEFINE BUSINESS & ARCHITECTURE REQUIREMENTS	271
5	Phase	200000	DEVELOP APPLICATION	1,015
6	Phase	300000	IMPLEMENTATION PHASE	281
7	Phase	400000	POST IMPLEMENTATION SUPPORT	77
8				2,190

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:	361,350	30,591	24,507	32,454	25,999	34,430	509,331
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	150,000	154,500	159,135	163,909	168,826	173,891	970,261
Infrastructure Subtotal	27,628	19,801	20,395	21,007	21,637	22,286	132,753
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	538,978	204,892	204,037	217,370	216,462	230,607	1,612,346
Annual Return on Investment	(278,978)	55,108	55,963	42,630	43,538	29,393	(52,346)
Annual Costs/Savings Ratio	207.30%	78.80%	78.48%	83.60%	83.25%	88.70%	, , ,
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	538,978	743,870	947,906	1,165,276	1,381,738	1,612,346	1,612,346
Cumulative Return on Investment	(278,978)	(223,870)	(167,906)	(125,276)	(81,738)	(52,346)	(52,346)
Cumulative Cost/Savings Ratio	207.30%	143.05%	121.53%	112.05%	106.29%	103.36%	103.36%
Year Positive Payback Achieved							NO PAYBACK
State or Federal Mandate?							
Signatures:							
Benefits Reviewed By Project Sponsor				Date:			
				23.13.			
Costs (including IT Resources) Reviewed By							
Information Technology Project Manager				Date:			
			-				

#### Savings Detail

	Project Savings		Unit		Rate per		Annual
Benefit/Savings Description	Category	Budget Category/Funding Source	Desc	Units	Unit	<b>Total Savings</b>	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							
surveilance 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 surveilance 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					0	
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							l
queue wait times.	Intangible Benefit					0	

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
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			1	260,000	260,000	
\$ 130,000 <i>)</i> .	Cost Avoidance			'	200,000	200,000	
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Savings Detail

		Affects Project ROI?				ROI	?		Р	otential Savin	gs Extension	S		
	Project Savings				Ĭ.,	Ĭ.,	_[.							
Benefit/Savings Description	Category	Y1	Y2	Y3	3   Y4	4   Y	5 Y	76	Y1	Y2	Y3	Y4	Y5	Y6
Add a new tool to the law enforcement			•	ŀ			l				į	i I I	i i i	i i
toolkit. The current system isn't very			İ	-			i			•	ļ	! ! !	! ! !	1 1 1
usable unless you have a mugshot			ļ	į	į		į							
quality picture. Typical static or			į	ļ			į							
surveilance photos aren't good enough.			į	į			į							
The new systems now can recognize			į	į			į							
faces from live camera feeds or static			İ	İ			ı				į			
photos, as low as 24 pixels between the			İ	į	İ	İ	ı			İ	į			į
eyes.			İ	ĺ			ı			İ	İ			
	Intangible Benefit		İ	ĺ			ı							
Since the existing bio facial system			İ	i	Ī	i	l					i I	i i	ī ! !
can't use surveilance or static photos			İ	-			i			•	ļ	! ! !	! ! !	1 1 1
unless they are high quality, the benefit			İ	-			i			ļ	ļ	! ! !	! ! !	1 1 1
of a new system would greatly reduce			į	ļ			į							
the time for officers to identify persons			İ	İ			i							
of interest. Typically would take 2			İ	İ			İ			İ	İ			
days/16 hours knocking on doors,			İ	ĺ	ĺ	ĺ	- 1							
create a list of suspects, draw a sketch,			İ	-			i			ļ	ļ	! ! !	! ! !	1 1 1
validate the facial identify the			ļ	į	į		į							
	Intangible Benefit		į	į			į							
Reduce the time to solve a crime.	<u> </u>		1	1	1	1				:	:	1 1	<u> </u>	î !
Currently all photos are sent to the			İ	ĺ			ı			İ	İ			
State of Michigan for advanced			İ	ĺ	ĺ	ĺ	Ì							
scanning enhancement. The			İ	-			i			ļ	ļ	! ! !	! ! !	1 1 1
turnaround time can be between 2			1	ļ										
weeks and 2 months. The higher			į	ļ			į							
severity the crime determines the place			į	į			į							
in the wait queue. Not all communities			İ	l										
have the same priorities on various			İ	ĺ	ĺ	İ	İ							}
crimes, if we include in this project			-				İ							•
additional admin level licenses so			ļ				į				•	 		
agencies could enhance photos			ļ	į	-		į							
themselves, then we could reduce			•	į										
•	Intangible Benefit		•	1			į			į	į		į	į

Return on Investment Analysis

#### Savings Detail

		Af	fec	ts P	ro	jec	t R	OI?		Potential Savings Extensions					
Benefit/Savings Description	Project Savings Category	Y1	Y	2 Y:	3 '	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6	
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									000 000 00	000 000 00	000 000 00	000 000 00	000 000 00	000.000	
\$150,000).	Cost Avoidance	Х	Х	Х	)	(	Х	Х	260,000.00	260,000.00	260,000.00	260,000.00	260,000.00	260,000	
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#### Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
Tangible Benefits Subtotal:							
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
Cost Avoidance Subtotal:	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 surveilance 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							
surveilance 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.							

#### 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

Date: 07/22/2022

Return on Investment Analysis

#### Cost Detail

								Affects Project			ct R	OI?	
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual				.,		
Cost Description	Category	Source	Desc	Units	Unit	<b>Total Cost</b>	Multiplier	<b>Y1</b>	<b>Y2</b>	<b>Y3</b>	<b>Y</b> 4	Y5	Y6
IT Hours - New Development	Development Svcs			2,190	165	361,350	1.030	Х		ļ	ļ	ī	$\Box$
IT Hours - System Maintenance	Development Svcs			40	165	6,600	1.030		Х	Х	Х	Х	Х
IT Hours - Customer Support	Development Svcs			100	165	16,500	1.030		Х	Х	Χ	Х	Х
IT Hours - Planned Maintenance	Development Svcs			40	165	6,600	1.030		Х	į	Х		Х
User Hours - New Development	Development Svcs					0				ĺ	ĺ	•	
User Hours - PTNE/OT	Development Svcs					0				i			
Contractor Professional Services	Development Svcs					0							
PC System - Acquisition	Hardware				639	0				į			
PC System - Maintenance	Hardware				3,352	0				Ì		ì	
Laptop - Acquisition	Hardware				922	0							
Laptop - Maintenance	Hardware				3,352	0				į	İ	•	
Tablet Notebook - Acquisition	Hardware				1,069	0				1	1		
Tablet Notebook - Maintenance	Hardware				3,352	0				1	•		
File Space (100GB)	Hardware		ANN		23	0							
Package Software - Acquisition	Software			1	150,000	150,000	1.030	Х		į			
Package Software - Maintenance	Software			1	150,000	150,000	1.030		Х	Х	Х	Х	Х
Business Objects Access	Software					0				İ	İ	į	
Term Emulation SFTW-Acquisition	Software					0				į	İ	•	
Term Emulation SFTW-Maintenance	Software					0				Î		1	
Oracle Enterprise Software Purchase -										!		į	
Per Processor (4 Cores) - Requires										į	į	į	1
Annual Support Below	Infrastructure				42,280	0				İ	į	į	1
Oracle Enterprise Software Support -													
Per Processor (4 Cores)	Infrastructure				9,293	0	1.030			į		į	į
SQL Server Enterprise Software													
Purchase - Per Processor (4 cores) -										Ì	ĺ	ĺ	1
Purchased Sept 2019-Aug 2020 -										ļ		į	
Includes Support thru Aug 2022	Infrastructure				16,985	0				İ	į	į	
SQL Server Enterprise Software													
Purchase - Per Processor (4 cores) -										į	į	1	
Purchased Sept 2020-Aug 2021 -										į	ļ	į	
Includes Support thru Aug 2022	Infrastructure		<u> </u>		12,724	0				<u>i</u>	<u>i</u>	<u>i_</u>	<u>i_</u>

REV: February 22, 2022

Return on Investment Analysis

#### Cost Detail

								Affects Project			oiec	t RC	1?
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual			į			
Cost Description	Category	Source	Desc	Units	Unit	<b>Total Cost</b>	Multiplier	<b>Y1</b>	Y2	Y3	<b>Y4</b>	Y5	Y6
SQL Server Enterprise Software									ŀ	ļ			
Purchase - Per Processor (4 cores) -									•	į	<u> </u>		
Purchased Sept 2021-Aug 2022 -									İ	į	•	į į	
Includes Support thru Aug 2022	Infrastructure			2	8,463	16,926	1.030	х	İ	ĺ	•		
SQL Server Enterprise - Support, Per										Ĭ			
Processor (4 cores) - Sept 2022 and										į	•		
Beyond	Infrastructure			2	4,261	8,522	1.030		Х	Х	Х	Х	Χ
SQL Server Standard Software									-	į	•		
Purchase - Per Processor (4 cores) -										į	•	. 1	,
Purchased Sept 2019-Aug 2020 -									İ	į	•	i i	,
Includes Support thru Aug 2022	Infrastructure				4,429	0			<u> </u>	į .	<u> </u>		
SQL Server Standard Software										į	<u> </u>		
Purchase - Per Processor (4 cores) -										į	•		
Purchased Sept 2020-Aug 2021 -									ĺ	ĺ	•		
Includes Support thru Aug 2022	Infrastructure				3,317	0			<u> </u>	<u>!</u>	[		
SQL Server Standard Software										į	•		
Purchase - Per Processor (4 cores) -									į	į	•		
Purchased Sept 2021-Aug 2022 -									ļ	ļ	<u> </u>		
Includes Support thru Aug 2022	Infrastructure				2,205	0				<u> </u>			
SQL Server - Standard Support, Per									İ	į	•		
Processor (4 cores) - Sept 2022 and									•	į			
Beyond	Infrastructure				1,112	0			<u> </u>	!			
Websphere Basic Per Processor									į	į	•		
Single/Dual Core - Includes Year 1									İ	ĺ	•		
Maintenance	Infrastructure				3,769	0				<u> </u>		<u> </u>	
l	ļ								į	į	•		
Websphere Basic Per Processor									ļ	ļ	<u> </u>		
Single/Dual Core - Year 2 and Beyond	Infrastructure				754	0			<u> </u>	<u> </u>	<u> </u>		
Websphere ND Per Processor									İ	į	•	. !	
Single/Dual Core - Includes Year 1									İ	ĺ			
Maintenance	Infrastructure				14,170	0			<u> </u>	!			
l <u>.</u>	1								İ	į			
Websphere ND Per Processor	l '							1		1	<b>(</b>	i į	
Single/Dual Core - Year 2 and Beyond	Infrastructure				2,835	0		<u> </u>	ļ	!	<u> </u>	<u> </u>	
SSL Certificate	Infrastructure			1	910	910	1.030	Х	Χ	Х	Х	Х	Χ

Return on Investment Analysis

#### Cost Detail

								Af	fect	s Pı	ojeo	t RC	OI?
Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Y1	<b>Y2</b>	<b>Y</b> 3	<b>Y</b> 4	Y5	Y6
Internet Access	Infrastructure			1	190	190	1.030	Х	Χ	Χ	Χ	Х	Х
- 11	Infrastructure		ANN		500	0							
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure		ANN	2	446	892	1.030	х	х	х	х	х	х
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$601 On Premise Physical Server = \$2,735	Infrastructure		ANN			0							
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$3,057	Infrastructure		ANN	2	951	1,902	1.030	x	x	x	x	х	x
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$8,715	Infrastructure		ANN	4	1,702	6,808	1.030	х	х	х	х	Х	х
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$3,167 On Premise Physical Server = \$10,758	Infrastructure		ANN			0							
Extra Large - 40 Core 192GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$24,137	Infrastructure		ANN			0							

Return on Investment Analysis

#### Cost Detail

		Potential Cost Extensions								
	Project Cost									
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6			
IT Hours - New Development	Development Svcs	361,350.00								
IT Hours - System Maintenance	Development Svcs		6,798.00	7,001.94	7,212.00	7,428.36	7,651.21			
IT Hours - Customer Support	Development Svcs		16,995.00	17,504.85	18,030.00	18,570.90	19,128.02			
IT Hours - Planned Maintenance	Development Svcs		6,798.00		7,212.00		7,651.21			
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									
Laptop - Acquisition	Hardware									
Laptop - Maintenance	Hardware									
Tablet Notebook - Acquisition	Hardware									
Tablet Notebook - Maintenance	Hardware									
File Space (100GB)	Hardware									
Package Software - Acquisition	Software	150,000.00								
Package Software - Maintenance	Software		154,500.00	159,135.00	163,909.05	168,826.32	173,891.11			
Business Objects Access	Software									
Term Emulation SFTW-Acquisition	Software									
Term Emulation SFTW-Maintenance	Software									
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									
SQL Server Enterprise Software										
Purchase - Per Processor (4 cores) -										
Purchased Sept 2020-Aug 2021 -										
Includes Support thru Aug 2022	Infrastructure									

Return on Investment Analysis

#### Cost Detail

		Potential Cost Extensions							
Cost Description	Project Cost Category	Y1	Y2	Y3	<b>Y</b> 4	Y5	Y6		
SQL Server Enterprise Software		<del>†                                    </del>	<u> </u>						
Purchase - Per Processor (4 cores) -		1 !							
Purchased Sept 2021-Aug 2022 -			į						
Includes Support thru Aug 2022	Infrastructure	16,926.00	ļ						
SQL Server Enterprise - Support, Per		10,0000							
Processor (4 cores) - Sept 2022 and			į						
Beyond	Infrastructure		8,777.66	9,040.99	9,312.22	9,591.59	9,879.33		
SQL Server Standard Software			ŕ	,	,	,	,		
Purchase - Per Processor (4 cores) -			į		İ	İ			
Purchased Sept 2019-Aug 2020 -			ļ						
Includes Support thru Aug 2022	Infrastructure								
SQL Server Standard Software									
Purchase - Per Processor (4 cores) -			ļ						
Purchased Sept 2020-Aug 2021 -			į						
Includes Support thru Aug 2022	Infrastructure		į						
SQL Server Standard Software					Ì	ľ I			
Purchase - Per Processor (4 cores) -			į						
Purchased Sept 2021-Aug 2022 -			į						
Includes Support thru Aug 2022	Infrastructure		ļ						
SQL Server - Standard Support, Per									
Processor (4 cores) - Sept 2022 and			į						
Beyond	Infrastructure		ļ		į	į			
Websphere Basic Per Processor									
Single/Dual Core - Includes Year 1			į						
Maintenance	Infrastructure								
			į						
Websphere Basic Per Processor			į		İ	İ			
Single/Dual Core - Year 2 and Beyond	Infrastructure	į į							
Websphere ND Per Processor									
Single/Dual Core - Includes Year 1			į						
Maintenance	Infrastructure								
l									
Websphere ND Per Processor			į		İ	İ			
Single/Dual Core - Year 2 and Beyond	Infrastructure								
SSL Certificate	Infrastructure	910.00	937.30	965.42	994.38	1,024.21	1,054.94		

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#### Cost Detail

				Potential Cos	t Extensions		
Cost Description	Project Cost Category	Y1	Y2	Y3	Y4	Y5	Y6
•	. ,						
Internet Access	Infrastructure	190.00	195.70	201.57	207.62	213.85	220.26
Imperva Web Application Firewall							
(External Web Applications Only)	Infrastructure		į		i		
App Code Directories on Consolidated		000.00	040.70	0.40.00	074.74	4 000 05	4 004 07
IIS Server (Virtual)	Infrastructure	892.00	918.76	946.32	974.71	1,003.95	1,034.07
Extra Small - 2 Core 8GB RAM, 500GB		1	į		į		
Drive, 10 GB NIC - Cloud/Virtual = \$601		]	ļ				
On Premise Physical Server = \$2,735	Infrastructure	1	į		į		
·	iiiiasiiuciure	i	i		i		
Small - 4 Core 16GB RAM, 500GB			ļ		ļ		
Drive, 10 GB NIC - Cloud/Virtual = \$951		l	į		į		
On Premise Physical Server = \$3,057	Infrastructure	1,902.00	1,959.06	2,017.83	2,078.37	2,140.72	2,204.94
Medium - 8 Core 32GB RAM, 500GB	minastractare	1,302.00	1,909.00	2,017.00	2,070.07	2,140.72	2,204.34
Drive, 10 GB NIC - Cloud/Virtual =		i	į	į	į		
\$1,702 On Premise Physical Server =		ļ	ļ		ļ		
\$8,715	Infrastructure	6,808.00	7.012.24	7.222.61	7.439.29	7,662.46	7,892.34
Large - 16 Core 64GB RAM, 500GB		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	1,100.20	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,
Drive, 10 GB NIC - Cloud/Virtual =			į		į		
\$3,167 On Premise Physical Server =		i	į	į	į		
\$10,758	Infrastructure		ļ				
Extra Large - 40 Core 192GB RAM,			:		:		
500GB Drive, 10 GB NIC - Cloud/Virtual		]	į		į		
= \$7,564 On Premise Physical Server =		]	ļ		ļ		
\$24,137	Infrastructure						

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#### Cost Summary

	Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
D	evelopment Services:							
	IT Hours - New Development	361,350						361,350
	IT Hours - System Maintenance		6,798	7,002	7,212	7,428	7,651	36,092
	IT Hours - Customer Support		16,995	17,505	18,030	18,571	19,128	90,229
	IT Hours - Planned Maintenance		6,798		7,212		7,651	21,661
	User Hours - New Development							
	User Hours - PTNE/OT							
	Contractor Professional Services							
	Development Services Subtotal:	361,350	30,591	24,507	32,454	25,999	34,430	509,331
Н	ardware:	,					,	
	Hardware Subtotal:							
S	oftware:							
	Package Software - Acquisition	150,000						150,000
	Package Software - Maintenance		154,500	159,135	163,909	168,826	173,891	820,261
	Software Subtotal:	150,000	154,500	159,135	163,909	168,826	173,891	970,261
In	frastructure:							
	SQL Server Enterprise Software Purchase -							
	Per Processor (4 cores) - Purchased Sept							
	2021-Aug 2022 - Includes Support thru Aug							
	2022	16,926						16,926
Ī								
ĺ	SQL Server Enterprise - Support, Per							
ĺ	Processor (4 cores) - Sept 2022 and Beyond		8,778	9,041	9,312	9,592	9,879	46,602
	SSL Certificate	910	937	965	994	1,024	1,055	5,886
	Internet Access	190	196	202	208	214	220	1,229
	App Code Directories on Consolidated IIS							
	Server (Virtual)	892	919	946	975	1,004	1,034	5,770

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Small - 4 Core 16GB RAM, 500GB Drive, 10							
GB NIC - Cloud/Virtual = \$951 On Premise							
Physical Server = \$3,057	1,902	1,959	2,018	2,078	2,141	2,205	12,303
Medium - 8 Core 32GB RAM, 500GB Drive,							
10 GB NIC - Cloud/Virtual = \$1,702 On							
Premise Physical Server = \$8,715	6,808	7,012	7,223	7,439	7,662	7,892	44,037
Infrastructure Subtotal	27,628	19,801	20,395	21,007	21,637	22,286	132,753
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	538,978	204,892	204,037	217,370	216,462	230,607	1,612,346

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#### Assumptions

Date	Assumption Description
22-Jul-22	Assuming that current network configuration will be replaced with 6 new servers from the current configuration of 9.
	Assuming the use of Virtual Servers.
	The Package Software Acquisition and Maitenance are estimates and will not be known until the RFP has been bid.
22-Jul-22	RFP project was started in the last quarter of the 2021-22 master plan.
	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
22-Jul-22	module. We'll assume 10 mugshot photos would be analyzed a month. \$420 x 10 per month X 12 months = \$50,400.

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