Project Name: EA CJIS Compliance Handbook and Policies Project ID: TT9186CJ

Leadership Group: IT Steering Co	ommittee		
Department: Information Technol	ogy	Division: Tec	hnical Services and Networking
Project Sponsor: EJ Widun	Date Reque	ested: 6/22/2018	PM Customer No. 186
Request Type: New Development	;		
IT Team Name: Enterprise Archite	ecture	IT Team No: T	
Project Manager/Leader: Bob Ole	ch		
Account Account		Services and g	Customer Name: Information Technology
Grant Funded? No		Mandate? No Mandate Source:	

Project Goal

Engage a vendor to create and publish a CJIS Compliance Handbook so that Oakland County will have a CJIS handbook to help ensure CJIS Policy compliance during an audit.

Business Objective

Ensure Oakland County meets the requirements of various policies and directives originating from the CJIS Policy, the states' CJIS System Agencies (CSA), and other criminal justice agencies and organizations. The CJIS Compliance Handbook will identify the point-in-time applicability and compliance based on each of the CJIS Policy 'shall' statements. The handbook will identify the status of compliance and point to or reference existing artifacts that support the status finding for a given compliance element.

Major Deliverables

- 1. The Oakland County Michigan CJIS Compliance Handbook
 - a. This deliverable will be a point-in-time document that identifies for stakeholders the current state of compliance and provides links to or copies of relevant artifacts to defend the state of compliance.
 - b. It is proposed this document be created by a CJIS Audit & Compliance Expert (ACE) and maintained on an ongoing basis by Oakland County.
- 2. The CJIS ACE Mitigation Strategy and Plan for Oakland County Michigan
 - a. This deliverable will identify if there are gaps in meeting compliance and present a mitigation strategy and plan to address the gaps.

Approach

Project Name: EA CJIS Compliance Handbook and Policies Project ID: TT9186CJ

Phase 1 – Establish Compliance Profile

- 1. Conduct Preliminary Compliance Review Conference Call (kick-off).
 - a. There will be an introduction of key project team members from Oakland County and the CJIS ACE Team.
 - b. The CJIS ACE team will make initial information requests to prepare for onsite visit and assessment to ensure the meeting operates as efficiently as possible.
 - c. The onsite visit and assessment will be scheduled and logistics will be discussed.
- 2. Conduct the two-day onsite assessment.
 - a. The CJIS ACE representative(s) will travel to Oakland County's headquarters located in Pontiac, Michigan.
 - b. Key project team members from each of Oakland County (Law Enforcement Office-centered) affected business and technical units will be interviewed by the CJIS ACE team.
 - c. The assessment process will begin through detailed information gathering and discussion to determine which of the CJIS policies apply to each unit.
 - d. The CJIS ACE team will begin the analysis process to determine the level of compliance on each CJIS compliance policy.
- 3. Request, obtain and analyze compliance artifacts.
 - a. For the purposes of including the artifacts in the Oakland County Michigan CJIS Compliance Handbook, the CJIS ACE team will obtain links to appropriate document stores that exist, obtain digital copies of the relevant artifacts or refer to physical locations where artifacts are stored.
 - b. For purposes of publishing the CJIS Compliance Handbook, the artifacts must be available and viewable to stakeholders who have an interest in the county's CJIS compliance status.
- 4. Present draft of Compliance Profile Report.
 - a. The CJIS ACE Compliance Profile will reflect for each CJIS policy requirement whether the appropriate artifact(s) exists, does not exist, or was requested by not received.
 - b. CJIS ACE team will complete and present a draft CJIS ACE Compliance Profile for review and comment by the company team members.
- 5. Customer review, updates and approval.
 - a. CJIS ACE team will update the CJIS ACE Compliance Profile based on

Project Name: EA CJIS Compliance Handbook and Policies Project ID: TT9186CJ

feedback by the company team members.

- 6. Deliver final Compliance Profile Report.
 - a. CJIS ACE Compliance Profile will be submitted electronically to Oakland County (Law Enforcement's Office), Michigan as the final deliverable for Phase I.

Phase 2 – Establish the Mitigation Strategy and Recommendations

- 1. Prioritize Compliance Profile Recommendations (conference calls).
- 2. Develop Mitigation Strategy and Recommendations (conference calls).
 - The CJIS ACE team will review the findings in the CJIS ACE Compliance Profile and will begin forming the mitigation strategy and plan.
- 3. Develop CJIS Compliance Handbook.
 - a. The CJIS ACE team will associate the artifacts and documentation that support the CJIS Compliance finding.
 - b. This deliverable will provide a link or a digital copy of the artifact embedded in the document.
 - c. The CJIS ACE team will reflect rationale in the compliance statement that provides a defense as to why the specific CJIS policy requirement is met.
- 4. Present draft of Mitigation Strategy and Recommendation.
- 5. Customer review, updates and approval.
- 6. Deliver final Mitigation Strategy and Recommendations.
- 7. Deliver final CJIS Compliance Handbook.

Research & Analysis

Gartner Research Recommendation:

Unlike other compliance frameworks, CJIS has no accredited assessors and no standardized assessment procedure. Thus, uniform "CJIS compliance" isn't possible. Instead, each law enforcement agency must enter into its own authorization agreement with a CSP. Some states have entered into statewide agreements with certain CSPs that would cover agency use of clouds. CJIS agreements typically rely on some other compliance audit, like FedRAMP or ISO 27001, to demonstrate CSP compliance with applicable CJIS requirements.

Benefits

See Return on Investment (ROI) Analysis Document

Project Name: EA CJIS Compliance Handbook and Policies Project ID: TT9186CJ

Impact

Number of Users All of IT directly

Divisions Information Technology

Leadership Groups IT Steering Committee

Risk

Business Environment Low – Project will require some changes to existing business

processes

Technical Environment Low

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:

Role:	<u>Name</u>	Hours per Day
Project Sponsor	EJ Widun	As Needed
CIO	Phil Bertolini	As Needed
СТО	Jim Taylor	As Needed
CISO	Bridget Kravchenko	As Needed
IT Director	Mike Timm	As Needed
TSN Manager	Carl Wilson	As Needed
Application Services Manager	Tammi Shepherd	As Needed
Internal Services Manager	Janette McKenna	As Needed
CLEMIS Manager	Jeff Nesmith	As Needed

Facilities

Project Name: EA CJIS Com	pliance Handbook and Policies	Project ID: TT9186CJ

Technical

Funding

• Technical Services & Networking

Other

• Oakland County will enter into an agreement with an existing vendor, Access Interactive for the services.

Priority

Constraints

Exclusions

Project Name: EA CJIS Compliance Handbook and Policies Project ID: TT9186CJ

PROJECT PHASE AUTHORIZATION

Phase(s): All			
Total Estimated Application Services	Hours:	0	
Total Estimated Technical Systems	Hours:	358	
Total Estimated CLEMIS	Hours:	160	
Total Estimated Internal Services	Hours:	0	
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 SUN	IMARY		

Authorized Development (see above)	Hours:	
Preliminary Estimated Development for Future Phases	Hours: 518	
Grand Total Estimated Development	Hours: 518 Cost: \$85,470	

Project Name: EA CJIS Compliance Handbook and Policies Project ID: TT9186CJ

PROJECT COMPLETION AUTHORIZATION

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

Project Name: EA CJIS Compliance Handbook and Policies Project ID: TT9186CJ

EA CJIS Compliance Handbook and Policies - Size Estimate (+/- 10% to 50%)											
Type	ID	Task Name	Estimated Hours	Estimate Notes							
1 Phase	000000	■ PROJECT MANAGEMENT	161								
2 Phase	100000	■ CJIS Playbook Development & Implementation	357								
3											
1			518								

As Of: 6/22/2018

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:	135,660	0	0	0	0	0	135,660
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	135,660	0	0	0	0	0	135,660
Annual Return on Investment	(135,660)						(135,660)
Annual Costs/Savings Ratio	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	135,660	135,660	135,660	135,660	135,660	135,660	135,660
Cumulative Return on Investment	(135,660)	(135,660)	(135,660)	(135,660)	(135,660)	(135,660)	(135,660)
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:			

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
Reduces risk and exposure	Intangible Benefit					0	
Provide appropriate controls to protect the confidentiality, integrity, and availability of critical criminal justice information Contributes to maintaining the operational integrity and security of interconnected criminal justice information systems critical to ensuring	Intangible Benefit					0	
public safety	Intangible Benefit					0	
						0	
						0	

As Of: 6/22/2018

Return on Investment Analysis

Savings Detail

	Affects Project ROI?					Potential Savings Extensions						
Benefit/Savings Description	Project Savings Category	Y1 Y2	Y3	Y 4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
Reduces risk and exposure	Intangible Benefit		į	į				1		i i	i i	
Provide appropriate controls to protect the confidentiality, integrity, and availability of critical criminal justice												
information	Intangible Benefit		<u> </u>	<u> </u>								
Contributes to maintaining the operational integrity and security of interconnected criminal justice information systems critical to ensuring												
oublic safety	Intangible Benefit		<u> </u>	<u> </u>								
		$+$ \vdash	+	<u> </u>								

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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							
T "11 D "" 0 11 11							
Tangible Benefits Subtotal:							
Cost Avoidance:							
Cost Avoidance Subtotal:							
Coot / Wordanies Castotan							
Intangible Benefit:							
Reduces risk and exposure							
Provide appropriate controls to protect the							
confidentiality, integrity, and availability of							
critical criminal justice information							
Contributes to maintaining the operational							
integrity and security of interconnected							
criminal justice information systems critical							
to ensuring public safety							
Savings Total:							

Return on Investment Analysis

		Affects F		s Pro	ject	ROI?						
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual					
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3 '	Y4 `	Y5 Y6
IT Hours - New Development - Year 1	Development Svcs	Technical Services & Networking	HR	518	165	85,470		Χ		T	Ŧ	-
IT Hours - System Maintenance	Development Svcs				165	0						
IT Hours - Customer Support	Development Svcs				165	0						
IT Hours - Planned Maintenance	Development Svcs				165	0						
User Hours - New Development	Development Svcs					0						i
User Hours - PTNE/OT	Development Svcs					0					į	
Contractor Professional Services	Development Svcs		EA	1	50,190	50,190		Χ			Ī	
PC System - Acquisition	Hardware				687	0						
PC System - Maintenance	Hardware				2,936	0					į	
Notebook - Acquisition	Hardware				1,115	0						
Notebook - Maintenance	Hardware				3,024	0						
Tablet Notebook - Acquisition	Hardware				1,421	0					į	i
Tablet Notebook - Maintenance	Hardware				2,800	0						
Laserprinter - Acquisition	Hardware				1,432	0					Ī	
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					į	
Business Objects Access	Software					0					Ī	
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 Per Processor -												
Includes Year 1 Maintenance	Infrastructure				21,372	0					I	
Oracle Enterprise Per Processor - Year												
2 and Beyond	Infrastructure				3,432	0				<u> </u>	i_	

As Of: 6/22/2018

Return on Investment Analysis

								Affects Project		ROI?		
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual			į		
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3	Y4	Y5 Y6
SQL Server Enterprise - Per Processor											i	
(4 cores) - Purchased Sept 2016-Aug									į	- 1	į	į
2017 - Includes Maintenance thru Aug										į	į	į
2019	Infrastructure				24,533	0				į	į	į
SQL Server Enterprise - Per Processor										1	1	
(4 cores) - Purchased Sept 2017-Aug									ļ	į	ŀ	ļ
2018 - Includes Maintenance thru Aug										į	į	į
2019	Infrastructure				20,759	0				į	į	į
SQL Server Enterprise - Per Processor										İ	ľ	
(4 cores) - Purchased Sept 2018-Aug										ļ	ŀ	Į
2019 - Includes Maintenance thru Aug										į	į	į
	Infrastructure				16,985	0				į	į	į
SQL Server Enterprise - Maintenance,					·					į	i	į
Per Processor (4 cores) - Sept 2019										į	- 1	į
and Beyond	Infrastructure				4,218	0				į	į	į
SQL Server Standard - Per Processor					,					Ī		
(4 cores) - Purchased Sept 2016-Aug										Ì	i	Î
2017 - Includes Maintenance thru Aug										į	į	į
	Infrastructure				6,398	0				į	į	į
SQL Server Standard - Per Processor					,					į	i	į
(4 cores) - Purchased Sept 2017-Aug										ļ	ŀ	Į
2018 - Includes Maintenance thru Aug										į	į	į
2019	Infrastructure				5,414	0				į	į	į
SQL Server Standard - Per Processor										İ		
(4 cores) - Purchased Sept 2018-Aug										ļ	į	ļ
2019 - Includes Maintenance thru Aug										į	į	į
2019	Infrastructure				4,429	0				ĺ	ĺ	ĺ
SQL Server - Standard Maintenance,										İ	i	
Per Processor (4 cores) - Sept 2019										į	į	į
· · · · · · · · · · · · · · · · · · ·	Infrastructure				1,100	0				į	İ	į
Websphere Basic Per Processor										İ	i	
Single/Dual Core - Includes Year 1									j	ļ	į	ļ
Maintenance	Infrastructure				3,506	0				į	İ	į

As Of: 6/22/2018

Return on Investment Analysis

								Aff	fects	s Pro	iect	ROI?
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual				<u> </u>	
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3 '	/4	Y5 Y6
Websphere Basic Per Processor												
•	Infrastructure				701	0		li		į	- [
Websphere ND Per Processor	madiadao				701			H		- İ	- †	+
Single/Dual Core - Includes Year 1									ļ	İ	İ	İ
Maintenance	Infrastructure				13,180	0		li		ŀ	į	
Wall to large	i i i i dotta i d				10,100						\pm	
Websphere ND Per Processor									ļ	İ	İ	İ
· ·	Infrastructure				2,635	0				ļ	į	
SSL Certificate	Infrastructure				845	0		li				1
Internet Access	Infrastructure				180	0						
Imperva Web Application Firewall												
(External Web Applications Only)	Infrastructure		ANN		500	0				İ	ı	İ
App Code Directories on Consolidated										į		
1	Infrastructure		ANN		415	0		li		i	i	
Database (5 GB) on Consolidated SQL								ĺ				
Instance Server	Infrastructure		ANN		930	0		li			ļ	
Database Instance (125 GB DB) on										i		
	Infrastructure		ANN		2,395	0				İ	İ	İ
Database SQL Maint Server	Infrastructure		ANN		834	0				ŀ	Ī	
Database SQL Server Physical	Infrastructure		ANN		19,158	0						
	Infrastructure		ANN		610	0						
DB Maintenance (Semi-Annual Cycle								li		ŀ	į	
T - /	Infrastructure		ANN		1,220	0						
DB Maintenance (Semi-Annual Cycle										į	į	
\$2440)	Infrastructure		ANN		2,440	0				i		
Dedicated Virtual Server	Infrastructure		ANN		4,150	0						
DB Instance Setup	Infrastructure				976	0		İ		İ	<u> </u>	
DBA MS SQL Database Creation on								li		ŀ	į	
Exisitng Instance	Infrastructure				366	0						
									į	ŀ		
Extra Small - 2 Core 8GB RAM, 500GB										į	į	İ
Drive, 10 GB NIC - Cloud/Virtual = \$601			1			_				į	į	İ
On Premise Physical Server = N/A	Infrastructure		ANN			0			ļ		<u></u>	<u> </u>

As Of: 6/22/2018

Return on Investment Analysis

								Af	ect	Pro	ject	RO	?
Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Y1	Y2	Y 3	Y4	Y5	Y 6
Small - 4 Core 16GB RAM, 500GB													
Drive, 10 GB NIC - Cloud/Virtual = \$951										į		į	
	Infrastructure		ANN			0				İ	į	į	
Medium - 8 Core 32GB RAM, 500GB										Ì			
Drive, 10 GB NIC - Cloud/Virtual =										ĺ	İ	į	
\$1,702 On Premise Physical Server =										į	į	į	
\$9,751	Infrastructure		ANN			0		li		į	į	į	
Large - 16 Core 64GB RAM, 500GB													
Drive, 10 GB NIC - Cloud/Virtual =								li		İ		į	
\$3,167 On Premise Physical Server =										ĺ	İ	į	
· -, -	Infrastructure		ANN			0						ļ	
Extra Large - 40 Core 160GB RAM,								li		İ		į	
500GB Drive, 10 GB NIC - Cloud/Virtual								li		ĺ		ĺ	
= \$7,564 On Premise Physical Server =										į	į	Ī	
\$12,906	Infrastructure		ANN			0				ļ	ļ	ŀ	

Return on Investment Analysis

		Potential Cost Extensions									
	Project Cost				1						
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6				
IT Hours - New Development - Year 1	Development Svcs	85,470.00		:	:						
IT Hours - System Maintenance	Development Svcs				-	[]]					
IT Hours - Customer Support	Development Svcs										
IT Hours - Planned Maintenance	Development Svcs				İ						
User Hours - New Development	Development Svcs										
User Hours - PTNE/OT	Development Svcs				!		!				
Contractor Professional Services	Development Svcs	50,190.00									
PC System - Acquisition	Hardware										
PC System - Maintenance	Hardware						İ				
Notebook - Acquisition	Hardware										
Notebook - Maintenance	Hardware										
Tablet Notebook - Acquisition	Hardware				-						
Tablet Notebook - Maintenance	Hardware										
Laserprinter - Acquisition	Hardware				İ	!					
Laserprinter - Maintenance	Hardware										
PC Maintenance User Owned	Hardware				1						
Printer Maintenance User Owned	Hardware				İ						
File Space (100GB)	Hardware										
Package Software - Acquisition	Software				1						
Package Software - Maintenance	Software										
Business Objects Access	Software				İ	!					
Term Emulation SFTW-Acquisition	Software										
Term Emulation SFTW-Maintenance	Software										
Server - Acquisition/Upgrade	Infrastructure				!	•	1				
Server - Maintenance	Infrastructure										
Server Sftwre - Acquisition/Upgrade	Infrastructure			1	1	1	1				
Server Sftwre - Maintenance	Infrastructure						İ				
Server Rack Mount	Infrastructure				!						
Oracle Enterprise Per Processor -											
Includes Year 1 Maintenance	Infrastructure					1					
Oracle Enterprise Per Processor - Year		i		i							
2 and Beyond	Infrastructure										

Return on Investment Analysis

			Р	otential Cost	Extensions		
	Project Cost		1	1		!	
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6
SQL Server Enterprise - Per Processor			-	:	:	<u> </u>	
(4 cores) - Purchased Sept 2016-Aug							! ! !
2017 - Includes Maintenance thru Aug					ļ		
2019	Infrastructure				•		
SQL Server Enterprise - Per Processor			i	İ		ì	
(4 cores) - Purchased Sept 2017-Aug			-			1 1 1	! ! !
2018 - Includes Maintenance thru Aug							! ! !
2019	Infrastructure				•		
SQL Server Enterprise - Per Processor					Ì		
(4 cores) - Purchased Sept 2018-Aug			-			1 1 1	! ! !
2019 - Includes Maintenance thru Aug							
2019	Infrastructure				•	! !	
SQL Server Enterprise - Maintenance,							
Per Processor (4 cores) - Sept 2019			-			! ! !	! ! !
and Beyond	Infrastructure						
SQL Server Standard - Per Processor			1	<u> </u>	!		
(4 cores) - Purchased Sept 2016-Aug			İ			ī ! !	
2017 - Includes Maintenance thru Aug							
2019	Infrastructure				•	i !	
SQL Server Standard - Per Processor			İ	İ	i	i	
(4 cores) - Purchased Sept 2017-Aug			-			! ! !	! ! !
2018 - Includes Maintenance thru Aug					ļ		
2019	Infrastructure				•		
SQL Server Standard - Per Processor			i	!	!	 	
(4 cores) - Purchased Sept 2018-Aug							
2019 - Includes Maintenance thru Aug					•		
2019	Infrastructure		İ	İ	į	į	
SQL Server - Standard Maintenance,					!		
Per Processor (4 cores) - Sept 2019						i	
and Beyond	Infrastructure		İ	İ			
Websphere Basic Per Processor					!	! !	
Single/Dual Core - Includes Year 1							
Maintenance	Infrastructure					İ	

Return on Investment Analysis

		Potential Cost Extensions						
	Project Cost		1	İ		i i	!	
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6	
				!	!		!	
Websphere Basic Per Processor					İ		•	
Single/Dual Core - Year 2 and Beyond	Infrastructure							
Websphere ND Per Processor							<u> </u>	
Single/Dual Core - Includes Year 1			ļ	ļ	•		!	
Maintenance	Infrastructure			<u> </u>	<u> </u>		<u>; </u>	
Websphere ND Per Processor							•	
Single/Dual Core - Year 2 and Beyond	Infrastructure				ļ		<u> </u>	
SSL Certificate	Infrastructure			1	<u> </u>			
Internet Access	Infrastructure				<u> </u>		<u> </u>	
Imperva Web Application Firewall	mirastructure		<u> </u>	<u> </u>	<u> </u>	! !!	!	
	landara admir advissa				ļ		<u> </u>	
(External Web Applications Only)	Infrastructure			1	<u>;</u>	 	<u>;</u>	
App Code Directories on Consolidated	landara a taura di rana		Ì					
IIS Server (Virtual)	Infrastructure		}	ļ	<u> </u>	I I	ļ.	
Database (5 GB) on Consolidated SQL	l. f				ļ		<u> </u>	
Instance Server	Infrastructure			ļ	<u> </u>		-	
Database Instance (125 GB DB) on			Ì					
Consolidated SQL Server	Infrastructure			<u> </u>	<u> </u>	! ! !	!	
Database SQL Maint Server	Infrastructure							
Database SQL Server Physical	Infrastructure		<u> </u>	<u> </u>	<u> </u>			
DB Maintenance (Annual Cycle \$610)	Infrastructure		ļ	<u> </u>	<u> </u>			
DB Maintenance (Semi-Annual Cycle				ļ.] 	į	
\$1220)	Infrastructure							
DB Maintenance (Semi-Annual Cycle				į	İ		•	
\$2440)	Infrastructure				i !		1	
Dedicated Virtual Server	Infrastructure			ļ	!	I I I	<u>!</u>	
DB Instance Setup	Infrastructure				<u> </u>			
DBA MS SQL Database Creation on	l			İ			<u> </u>	
Exisitng Instance	Infrastructure			<u> </u>	<u> </u>	!	<u> </u>	
Extra Small - 2 Core 8GB RAM, 500GB							į	
Drive, 10 GB NIC - Cloud/Virtual = \$601							!	
	Infractructure		İ	İ			<u> </u>	
On Premise Physical Server = N/A	Infrastructure		<u>i</u>	<u>i</u>	<u>i</u>	<u> </u>	į	

Return on Investment Analysis

		Potential Cost Extensions								
Cost Description	Project Cost Category	Y1	Y2	Y3	Y4	Y5	Y6			
				! ! !		! ! !				
Small - 4 Core 16GB RAM, 500GB										
Drive, 10 GB NIC - Cloud/Virtual = \$951				İ		İ				
On Premise Physical Server = \$9,288	Infrastructure		<u> </u>	<u> </u>	ļ 	<u> </u>	<u></u>			
Medium - 8 Core 32GB RAM, 500GB				į						
Drive, 10 GB NIC - Cloud/Virtual =				İ		İ				
\$1,702 On Premise Physical Server =			į	İ	į	İ				
\$9,751	Infrastructure		i	•		•	i !			
Large - 16 Core 64GB RAM, 500GB			ĺ	<u> </u>	Ĭ I	<u> </u>	Ĭ I I			
Drive, 10 GB NIC - Cloud/Virtual =							! ! !			
\$3,167 On Premise Physical Server =				į		ļ				
\$10,446	Infrastructure			İ	•	İ				
Extra Large - 40 Core 160GB RAM,			<u> </u>		1 ! !		f I I			
500GB Drive, 10 GB NIC - Cloud/Virtual										
= \$7,564 On Premise Physical Server =			İ		į					
\$12,906	Infrastructure		į		į	İ				

As Of: 6/22/2018

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 - Year 1	85,470						85,470
IT Hours - System Maintenance							
IT Hours - Customer Support							
IT Hours - Planned Maintenance							
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services	50,190						50,190
Development Services Subtotal:	135,660						135,660
Hardware:							
Hardware Subtotal:							
Software:							
Software Subtotal:							
Infrastructure:							
Infrastructure Subtotal							
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	135,660						135,660

As Of: 6/22/2018

Return on Investment Analysis

Assumptions

Date	Assumption Description
12-Jun-18	Oakland County will enter into an agreement with an existing vendor, Access Interactive for the services.