Project Name: Clerks - Rewrite Trust and Abstract Systems Project ID: DB1212AT

Leadership Group: Courts				
Department: Clerk/Register		Division: Coun	ty Clerk	
Project Sponsor: Jennifer Howden	Date Requeste	d: 3/17/2020	PM Custon	ner No. 212
Request Type: New Develo	pment			
IT Team Name: Courts		IT Team No: B		
Project Manager/Leader: Beth Gleaso	n			
Account 95189 Account Number: Description:	: Clerk Legal F	Records	Customer Name:	Clerks
Grant Funded? No	Mai	ndate?	-	No
	Mai	ndate Source:		

Project Goal

To rewrite the Abstract and Trust Applications which are currently utilizing Access using newer technologies so that efficiencies can be utilized.

Business Objective

To utilize newer technologies so the Abstract and Trust Systems are more efficient technically which will decrease time of new user training, improve ease of use, gain time efficiencies when obtaining data, and decrease support calls.

Major Deliverables

- Detailed Project Plan
- Application and/or System Requirements
- End User Hardware and Software Requirements Document
- Technical Design Document
- Technical Architecture Diagram
- Training Plan
- User Acceptance Test Plan
- Implementation Plan
- Application Code
- Disaster Recovery Toolkit
- Service Center Knowledge Documents

Project Name: Clerks - Rewrite Trust and Abstract Systems Project ID: DB1212AT

Approach

- Develop Detailed Project Plan
- Review current business process and conduct needs assessment with customer, ensuring current manual processes are refined and automated.
- Security Reviews
- Document system requirements
- Determine and document system architecture and diagram
- Assess User Hardware and Software Requirements
- Conduct Tech Review
- Order hardware and software if needed
- Develop Implementation Plan
- Develop new system
- Develop User Acceptance Test Plan
- Test new system
- Acquire User Acceptance Sign off
- Conduct Change Control
- Develop Disaster Recovery Toolkit and Service Center Knowledge Documents
- Train users on new system
- Release new system into production

Research & Analysis

Gartner Research Recommendation - Research conducted, nothing found.

Benefits

See Return on Investment (ROI) Analysis Document

<u>Impact</u>

Number of Users 15

Divisions Clerk

Leadership Groups Courts

Project Name: Clerks - Rewrite Trust and Abstract Systems Project ID: DB1212AT

Risk

Business Environment Low - Project will require some changes to existing

business processes.

Technical Environment Low – Proven and previously implemented technologies

Assumptions

Staffing IT Staffing: resources will be available for the hours indicated per the attached

project plan.

Other Staffing: additional staffing will be available as follows:

Role: Name Hours per Day

Project Sponsor: Jennifer Howden As Needed

Facilities

•

Technical

•

Funding

•

Other

•

Priority

•

Project Name: Clerks - Rewrite Trust and Abstract Systems Project ID: DB1212AT

Constraints

•

•

Exclusions

• These systems will not integrate with any other system, or each other.

Project Name: Clerks - Rewrite Trust and Abstract Systems Project ID: DB1212AT

PROJECT PHASE AUTHORIZATION

Phase(s):		
Total Estimated Application Services	Hours: 1174	
Total Estimated Technical Systems	Hours: 113	
Total Estimated CLEMIS	Hours:	
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 SU	MMARY	

Authorized Development (see above)	Hours: 1287
Preliminary Estimated Development for Future Phases	Hours:
Grand Total Estimated Development	Hours: 1287 Cost: \$212,355

Project Name: Clerks - Rewrite Trust and Abstract Systems Project ID: DB1212AT

PROJECT COMPLETION AUTHORIZATION

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

Clerks - Rewrite Trust and Abstract Systems - Size Estimate (+/- 10% to 50%)

1	Туре	ID	Task Name	Estimated
2				Hours
3	Phase	000000	PROJECT MANAGEMENT	286
4	Phase	200000	DEFINE BUSINESS REQUIREMENTS	81
5	Phase	300000	DESIGN SYSTEM ARCHITECTURE	78
6	Phase	500000	DEVELOP APPLICATION	717
7	Phase	900000	TRAINING AND TRANSITION PHASE	10
8	Phase	600000	IMPLEMENTATION PHASE	81
9	Phase	080000	POST IMPLEMENTATION SUPPORT	34
10				1,287

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:	217,305	5,000	5,049	5,100	5,151	5,202	242,807
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	217,305	5,000	5,049	5,100	5,151	5,202	242,807
Annual Return on Investment	(217,305)	(5,000)	(5,049)	(5,100)	(5,151)	(5,202)	(242,807)
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	217,305	222,305	227,354	232,454	237,605	242,807	242,807
Cumulative Return on Investment	(217,305)	(222,305)	(227,354)	(232,454)	(237,605)	(242,807)	(242,807)
Cumulative Cost/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Year Positive Payback Achieved							NO PAYBACK
State or Federal Mandate?							NOFATBACK
Signatures:							
Benefits Reviewed By Project Sponsor				Date:			
Costs (including IT Resources) Reviewed By							
Information Technology Project Manager				Date:			

Return on Investment Analysis

Savings Detail

						1	
	Project Savings		Unit		Rate per		Annual
Benefit/Savings Description	Category	Budget Category/Funding Source	Desc	Units	Unit	Total Savings	Multiplier
						0	
Abstracts - Improve data							
communications from the clerk to the							
Secretary of State (SOS). Licensing							
abstracts are not being processed. This							
is a critical need for clerk.	Intangible Benefit					0	1.010
Abstracts & Trust - Technology is old							
and rewriting in new technology would							
decrease query time.	Intangible Benefit					0	1.010
Abstract & Trust - Rewrite would							
increase overall performance and user							
navigation.	Intangible Benefit					0	1.010
Abstract - Elminate confusion with SOS							
on what we are sending, ex. alcohol							
audits.	Intangible Benefit					0	1.010
Abstract - Improve error reporting.							
Currently most errors from SOS are not							
being relayed to clerk.	Intangible Benefit					0	1.010
Abstract & Trust - Eliminate issues for							
new county-wide technology							
implementations of Office products.	Intangible Benefit					0	1.010
Abstract & Trust - Increase ability for							
new reporting.	Intangible Benefit					0	1.010
Trust - Create the ability to reprint a							
receipt.	Intangible Benefit					0	1.010
Abstracts & Trust - Security risks with							
outdated technology.	Intangible Benefit					0	1.010
Abstracts & Trust - both databases are							
critical processes for the clerk. We							
could not have one or both down or not							
functioning properly due to aging							
technology.	Intangible Benefit					0	1.010
	-					0	
						0	
						0	
						0	
						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
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	

REV: May 21, 2018

Return on Investment Analysis

Savings Detail

		Af	fect	s Pr	oje	ct R	OI?	Potential Savings Extensions						
	Project Savings		ŀ		l	1	1							
Benefit/Savings Description	Category	Y1	Y2	Y3	Y4	Y5	Ye	6	Y1	Y2	Y3	Y4	Y5	Y6
			!		-	1					-	I	<u> </u>	:
Abstracts - Improve data					Ì	1						İ		
communications from the clerk to the			•	ļ	ļ	-	-		ļ		ļ	-	ļ	
Secretary of State (SOS). Licensing				!							ļ	1	ļ	!
abstracts are not being processed. This				ļ		1								İ
	Intangible Benefit		İ	į	İ	İ					ļ	İ	•	İ
Abstracts & Trust - Technology is old					l	1							1	
and rewriting in new technology would				!							}	ļ	1	
decrease query time.	Intangible Benefit					-						-		
Abstract & Trust - Rewrite would			į	į	İ	İ					İ	İ	İ	
increase overall performance and user				į	Ì									
	Intangible Benefit		•								1			
Abstract - Elminate confusion with SOS					İ	1						1		!
on what we are sending, ex. alcohol			İ	į		1					į	İ	1	İ
audits.	Intangible Benefit					-			ļ			-		
Abstract - Improve error reporting.				•	İ	1	1							
Currently most errors from SOS are not				į								1	1	
being relayed to clerk.	Intangible Benefit	i	İ	į	İ	Ì			į			İ	İ	İ
Abstract & Trust - Eliminate issues for					ŀ	1			ļ					
new county-wide technology						1								
implementations of Office products.	Intangible Benefit		İ	į	İ	1					į	į	1	•
Abstract & Trust - Increase ability for					ŀ	1	1					-		
new reporting.	Intangible Benefit		•								1			
Trust - Create the ability to reprint a					İ									
receipt.	Intangible Benefit	i		İ	İ	1								İ
Abstracts & Trust - Security risks with						-	-					1	1	
outdated technology.	Intangible Benefit													
Abstracts & Trust - both databases are			İ	į	İ	İ					ļ	İ	•	İ
critical processes for the clerk. We				İ								1		
could not have one or both down or not			!			-					1			
functioning properly due to aging			•	į		1						-	1	
technology.	Intangible Benefit		<u> </u>	<u> </u>	ļ.	į	į_				ļ	İ	<u> </u>	
			<u> </u>								ļ			
						1								
			<u> </u>	į	į	į					<u> </u>	İ	ļ	
			ļ	ļ	ļ	1	1					1		
				<u> </u>	<u> </u>	<u> </u>	<u> </u>				<u> </u>	<u> </u>	<u> </u>	<u> </u>

Return on Investment Analysis

Savings Detail

	Affects Project ROI?								Potential Savings Extensions					
Benefit/Savings Description	Project Savings Category	Y1	Y2	2 Y	′3	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
								<u> </u>						
			-	╁	\dashv									j !
			l	t	Ť									
				1	-									
		-	-	-	-							! !		<u> </u>
				ŀ	-									
													1	
			-	ŀ	-									
			-	+	+			<u> </u>		<u> </u>			!	<u> </u>

REV: May 21, 2018

Return on Investment Analysis

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:							
Cost Avoidance Subtotal:							
Intangible Benefit:							
Abstracts - Improve data communications from the clerk to the Secretary of State (SOS). Licensing abstracts are not being processed. This is a critical need for clerk.							
Abstracts & Trust - Technology is old and rewriting in new technology would decrease query time.							
Abstract & Trust - Rewrite would increase overall performance and user navigation.							
Abstract - Elminate confusion with SOS on what we are sending, ex. alcohol audits.							
Abstract - Improve error reporting. Currently most errors from SOS are not being relayed to clerk.							
county-wide technology implementations of Office products.							
Abstract & Trust - Increase ability for new reporting.							
Trust - Create the ability to reprint a receipt.							
Abstracts & Trust - Security risks with outdated technology.							

Return on Investment Analysis

Savings Summary

	Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
	Abstracts & Trust - both databases are critical processes for the clerk. We could not have one or both down or not functioning properly due to aging technology.							
Sa	vings Total:							

REV: May 21, 2018

Return on Investment Analysis

Cost Detail

22								Af	fect	s Pr	ojec	t RC) ?
	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	Development Svcs			1,287	165	212,355	1.010				<u> </u>		
IT Hours - System Maintenance	Development Svcs			10	165	1,650	1.010						Х
IT Hours - Customer Support	Development Svcs			10	165	1,650	1.010					х	Х
IT Hours - Planned Maintenance	Development Svcs			10	165	1,650	1.010	Х	х	х	Х	х	Х
User Hours - New Development	Development Svcs					0							
User Hours - PTNE/OT	Development Svcs					0							
Contractor Professional Services	Development Svcs					0							
PC System - Acquisition	Hardware				687	0			ŀ				
PC System - Maintenance	Hardware				2,936	0					į		
Notebook - Acquisition	Hardware				1,115	0			İ	ļ	!		
Notebook - Maintenance	Hardware				3,024	0							
Tablet Notebook - Acquisition	Hardware				1,421	0				ĺ			
Tablet Notebook - Maintenance	Hardware				2,800	0			İ	ĺ	1		
Laserprinter - Acquisition	Hardware				1,432	0					ļ		
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			İ	İ	İ		
Package Software - Acquisition	Software					0							
Package Software - Maintenance	Software					0					ļ		
Business Objects Access	Software					0			!	!	•		
Term Emulation SFTW-Acquisition	Software					0							
Term Emulation SFTW-Maintenance	Software					0			İ				
Server - Acquisition/Upgrade	Infrastructure				8,000	0							
Server - Maintenance	Infrastructure				360	0							
Server Sftwre - Acquisition/Upgrade	Infrastructure				335	0					l		
Server Sftwre - Maintenance	Infrastructure					0							
Server Rack Mount	Infrastructure				400	0			İ	İ	İ		
Oracle Enterprise Software Purchase -									İ				
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		İ	İ			J

Return on Investment Analysis

Cost Detail

22								Af	ects	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
SQL Server Enterprise Software												ļ
Purchase - Per Processor (4 cores) -												
Purchased Sept 2019-Aug 2020 -												
Includes Support thru Aug 2022	Infrastructure				16,985	0				į		
SQL Server Enterprise Software												-
Purchase - Per Processor (4 cores) -									ļ			
Purchased Sept 2020-Aug 2021 -									į			
Includes Support thru Aug 2022	Infrastructure				12,724	0						ļ
SQL Server Enterprise Software										i		ŀ
Purchase - Per Processor (4 cores) -												
Purchased Sept 2021-Aug 2022 -										l		į
Includes Support thru Aug 2022	Infrastructure				8,463	0						
SQL Server Enterprise - Support, Per										l		
Processor (4 cores) - Sept 2022 and									į			
Beyond	Infrastructure				4,261	0					İ	
SQL Server Standard Software										i		i
Purchase - Per Processor (4 cores) -										İ		
Purchased Sept 2019-Aug 2020 -												-
Includes Support thru Aug 2022	Infrastructure				4,429	0						
SQL Server Standard Software										ŀ		- į
Purchase - Per Processor (4 cores) -												ļ
Purchased Sept 2020-Aug 2021 -												
Includes Support thru Aug 2022	Infrastructure				3,317	0						İ
SQL Server Standard Software										ŀ		
Purchase - Per Processor (4 cores) -												
Purchased Sept 2021-Aug 2022 -												
Includes Support thru Aug 2022	Infrastructure				2,205	0						
SQL Server - Standard Support, Per					·					İ		i
Processor (4 cores) - Sept 2022 and												- 1
Beyond	Infrastructure				1,112	0					-	
Websphere Basic Per Processor												-
Single/Dual Core - Includes Year 1										l		ļ
Maintenance	Infrastructure				3,506	0						į

Return on Investment Analysis

Cost Detail

22								Aff	ects	s Pro	ject	ROI?
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual		ŀ	- 1	- 1	
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3	Y4¦	Y5¦Y6
Websphere Basic Per Processor												
Single/Dual Core - Year 2 and Beyond	Infractructura				701	0		li	į	į		
Websphere ND Per Processor	Illiastiucture				701	U		H	— i	i	- 1	
Single/Dual Core - Includes Year 1									i	-	-	
Maintenance	 Infrastructure				42.400	0			i		- 1	
Maintenance	imiastructure				13,180	0		H				
Websphere ND Per Processor												
Single/Dual Core - Year 2 and Beyond	Infrastructure				2,635	0		li				
SSL Certificate	Infrastructure				845	0			i	- i	t	
Internet Access	Infrastructure				180	0			-	- 1	1	
Imperva Web Application Firewall									ij			
(External Web Applications Only)	Infrastructure		ANN		500	0		li	į	į	İ	
App Code Directories on Consolidated									j	i	i	
IIS Server (Virtual)	Infrastructure		ANN		415	0						
Dedicated Virtual Server	Infrastructure		ANN		4,150	0			ij			
Extra Small - 2 Core 8GB RAM, 500GB					·				i			
Drive, 10 GB NIC - Cloud/Virtual =									İ			
\$601 On Premise Physical Server =									i	-	- 1	
N/A	Infrastructure		ANN			0			ļ	ļ		
Small - 4 Core 16GB RAM, 500GB												
Drive, 10 GB NIC - Cloud/Virtual =									į	İ		
\$951 On Premise Physical Server =									ļ	ł	- 1	
\$9,288	Infrastructure		ANN			0			ļ			
Medium - 8 Core 32GB RAM, 500GB									i			
Drive, 10 GB NIC - Cloud/Virtual =								li	į	i	- 1	
\$1,702 On Premise Physical Server =								li	į	į		
\$9,751	Infrastructure		ANN			0			İ	-	- 1	
Large - 16 Core 64GB RAM, 500GB									ļ		- [
Drive, 10 GB NIC - Cloud/Virtual =									ļ	į	-	
\$3,167 On Premise Physical Server =									į	į		
\$10,446	Infrastructure		ANN			0		L	i	i	j	

Return on Investment Analysis

Cost Detail

22					_			Affec	ts P	rojec	t ROI?
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual		-		, i
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1¦Y	2 Y3	Y4	Y5 Y6
Extra Large - 40 Core 160GB RAM,									1		
500GB Drive, 10 GB NIC -								l :	-		. !
Cloud/Virtual = \$7,564 On Premise									-		. !
Physical Server = \$12,906	Infrastructure		ANN			0					
Project Staff Training	Training					0					
User Training	Training					0		l			
											1
									-		

Return on Investment Analysis

Date: 06/16/2020

Cost Detail

22	1	Potential Cost Extensions											
	Project Cost												
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6						
IT Hours - New Development	Development Svcs	212,355.00											
IT Hours - System Maintenance	Development Svcs	1,650.00	1,666.50	1,683.17	1,700.00	1,717.00	1,734.17						
IT Hours - Customer Support	Development Svcs	1,650.00	1,666.50	1,683.17	1,700.00	1,717.00	1,734.17						
IT Hours - Planned Maintenance	Development Svcs	1,650.00	1,666.50	1,683.17	1,700.00	1,717.00	1,734.17						
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												
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												
Server Sftwre - Acquisition/Upgrade	Infrastructure												
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												

Page 12 REV: May 21, 2018

Return on Investment Analysis

Cost Detail

22		Potential Cost Extensions										
-	Project Cost		1			!	!					
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6					
SQL Server Enterprise Software				ļ	 	:						
Purchase - Per Processor (4 cores) -			}	-	 							
Purchased Sept 2019-Aug 2020 -			<u> </u>	ļ								
Includes Support thru Aug 2022	Infrastructure					•						
SQL Server Enterprise Software												
Purchase - Per Processor (4 cores) -					i ! !	İ						
Purchased Sept 2020-Aug 2021 -					i 	İ						
Includes Support thru Aug 2022	Infrastructure				! !							
SQL Server Enterprise Software												
Purchase - Per Processor (4 cores) -			İ	İ		İ						
Purchased Sept 2021-Aug 2022 -					i !	İ						
Includes Support thru Aug 2022	Infrastructure		-		 							
SQL Server Enterprise - Support, Per												
Processor (4 cores) - Sept 2022 and						•						
Beyond	Infrastructure											
SQL Server Standard Software					i i							
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) -					i !	İ						
Purchased Sept 2020-Aug 2021 -			-		 							
Includes Support thru Aug 2022	Infrastructure					!						
SQL Server Standard Software												
Purchase - Per Processor (4 cores) -					i !	İ						
Purchased Sept 2021-Aug 2022 -					i !	İ						
Includes Support thru Aug 2022	Infrastructure				i ! !	İ						
SQL Server - Standard Support, Per					i i							
Processor (4 cores) - Sept 2022 and						İ						
Beyond	Infrastructure					İ						
Websphere Basic Per Processor												
Single/Dual Core - Includes Year 1					i ! !							
Maintenance	Infrastructure		<u> </u>		<u> </u>	<u> </u>						

Return on Investment Analysis

Cost Detail

22			Poter	itial Cost Ext	tensions		
	Project Cost		!		!	!	}
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6
					! !		<u> </u>
Websphere Basic Per Processor			!	-	<u> </u>		!
	Infrastructure						
Websphere ND Per Processor							
Single/Dual Core - Includes Year 1			<u> </u>		į		İ
Maintenance	Infrastructure		<u> </u>	<u> </u>	i ! !		i ! !
Websphere ND Per Processor							
•	Infrastructure		•		į	İ	İ
SSL Certificate	Infrastructure		i !	1	i		
Internet Access	Infrastructure		!	1	<u> </u>	!	<u> </u>
Imperva Web Application Firewall					! !		
(External Web Applications Only)	Infrastructure				į		
App Code Directories on Consolidated			!	!	!		!
IIS Server (Virtual)	Infrastructure						
Dedicated Virtual Server	Infrastructure			<u> </u>		ļ	
Extra Small - 2 Core 8GB RAM, 500GB							
Drive, 10 GB NIC - Cloud/Virtual =			!		!		
\$601 On Premise Physical Server =							
N/A	Infrastructure				<u> </u>		İ
Small - 4 Core 16GB RAM, 500GB					i !		
Drive, 10 GB NIC - Cloud/Virtual =			!		!	ļ	!
\$951 On Premise Physical Server =							
\$9,288	Infrastructure						
Medium - 8 Core 32GB RAM, 500GB					į		
Drive, 10 GB NIC - Cloud/Virtual =							
\$1,702 On Premise Physical Server =							
\$9,751	Infrastructure						
Large - 16 Core 64GB RAM, 500GB			<u> </u>		į		İ
Drive, 10 GB NIC - Cloud/Virtual =			i ! !		i ! !	İ	
\$3,167 On Premise Physical Server =			!	-	!		}
\$10,446	Infrastructure			<u> </u>	<u> </u>		

Return on Investment Analysis

Cost Detail

22		Potential Cost Extensions										
	Project Cost		 									
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6					
Extra Large - 40 Core 160GB RAM,			<u> </u>	1	i i	1	<u> </u>					
500GB Drive, 10 GB NIC -					1	1						
Cloud/Virtual = \$7,564 On Premise					-							
Physical Server = \$12,906	Infrastructure						ļ					
Project Staff Training	Training		!		1	!						
User Training	Training											
					İ	1						
					İ							
			<u> </u>		-		•					
			î !	Ì		İ						
			!		-							

REV: May 21, 2018

Oakland County -- Clerks - Rewrite Trust and Abstract Systems 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	212,355						212,355
IT Hours - System Maintenance	1,650	1,667	1,683	1,700	1,717	1,734	10,151
IT Hours - Customer Support	1,650	1,667	1,683	1,700	1,717	1,734	10,151
IT Hours - Planned Maintenance	1,650	1,667	1,683	1,700	1,717	1,734	10,151
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
Development Services Subtotal:	217,305	5,000	5,049	5,100	5,151	5,202	242,807
Hardware:							
Hardware Subtotal:							
Software:							
Software Subtotal:							
Infrastructure:							
Infrastructure Subtotal							
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	217,305	5,000	5,049	5,100	5,151	5,202	242,807

Date: 06/16/2020

Return on Investment Analysis

Assumptions

Date	Assumption Description
Abstract	
6/3/2020	Assumes a Web front end
6/3/2020	Move to a new SQL environment for existing Access database
6/3/2020	13 Application tables, 10 entry screens 15 reports
6/3/2020	DBA effort to design tables 1 hour per table
6/3/2020	Will use consolidated application server.
6/3/2020	Will use consolidated database server.
6/3/2020	Assumes 5 users
6/3/2020	Utilize Okta
Trust	
6/3/2020	Assumes a Web front end
6/3/2020	Move to the latest version of SQL, the current SQL version SQL 2012 and is out of date
6/3/2020	13 Application tables, 10 entry screens 15 reports
6/3/2020	DBA effort to design tables 1 hour per table
6/3/2020	Will use consolidated application server.
6/3/2020	Will use consolidated database server.
6/3/2020	Assumes 5 users
6/3/2020	Utilize Okta

Page 17 REV: May 21, 2018