Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Point of Sale Terminal Replacement RFP   **Project ID: DJ1162TR**

Leadership Group: Finance/Admin		
Department: Information Technology	**Division:** Application Services	
Project Sponsor: Leah Ann Stafford	**Date Requested**: 4/10/2020	**PM Customer No.** 162
Request Type: _**New Development**_ **_Enhancement_** **_Customer Support_** **_Planned System Maintenance or Upgrade_**		
IT Team Name: eCommerce/Finance/Admin	**IT Team No**: J	
Project Manager/Leader: Dawn Clark		
Account Number: TBD **Account Description:** TBD		**Customer Name:** Public Health
Grant Funded? Yes **No**	**Mandate?** Yes **No** **Mandate Source:**	

Project Goal

To select a vendor to replace the current point of sale (POS) terminals across the County with configurable POS terminals that can integrate via as standard application interface with backend County systems, so that the deployment, maintenance, and updating of the POS terminals is flexible and efficient.

Business Objective

To determine a replacement solution for the current POS devices that will have an API for integration into multiple Oakland County systems and will allow for end-users to apply price changes and new products.

Major Deliverables

- Request for Proposal
- Detailed Project Plan
- Application and/or System Requirements
- Technical Design Document
- Technical Architecture Diagram
- Training Plan
- User Acceptance Test Plan
- Implementation Plan
- Training/User Manual(s)
- Software Implementation
- Service Level Agreement
- Disaster Recovery Toolkit
- Service Center Knowledge Documents

Project Name: Point of Sale Terminal Replacement RFP   **Project ID: DJ1162TR**

Approach
- Develop Detailed Project Plan
- Document business requirements.
- Collaborate with vendor on contract and SOW
- Assist and review vendor with finalizing technical design
- Identify and configure vendor application enhancements
- Develop Implementation Plan
- Develop User Acceptance Test Plan
- Conduct Unit Testing
- Conduct Functional Testing
- Conduction User Acceptance Testing
- Acquire User Acceptance Sign off
- Conduct Change Control
- Develop User Documentation, SLA, Disaster Recovery Toolkit, Service Center Knowledge Documents
- Train users on new system
- Release new system into production

Research & Analysis

Gartner Research Recommendation

- Research yielded no results

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users   32

Divisions   Health, Probate, Animal Control, EDCA, Clerks Office, Sheriff's Office, Treasury.

Leadership Groups: eGovernment, Courts, Finance / Admin, CLEMIS

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Project Scope and Approach

Project Name: Point of Sale Terminal Replacement RFP   **Project ID: DJ1162TR**

<u>Risk</u>

Business Environment   Medium – Project requires some changes to existing business processes.

Technical Environment   Medium – Proven implemented technologyies with new aspects and /or new requirements.

<u>Assumptions</u>

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:	Leah Ann Stafford	As Needed
Stakeholder:	John Cooperrider (Probate)	As Needed
Stakeholder:	Sara Stoddard (Health)	As Needed
Stakeholder:	Dan Hunter (EDCA)	As Needed
Stakeholder:	Jennifer Howden (Clerk)	As Needed
Stakeholder:	Katie West (Sherriff)	As Needed
Stakeholder:	Joanie Toole (Animal Control)	As Needed
Stakeholder:	Tammi Shepherd	As Needed

Facilities

- None

Technical

- None

Funding

- Information Technology

Project Name: Point of Sale Terminal Replacement RFP   **Project ID: DJ1162TR**

Other

- None

Priority

- TBD

Constraints

- None

Exclusions

- None

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Point of Sale Terminal Replacement RFP   **Project ID: DJ1162TR**

PROJECT PHASE AUTHORIZATION

Phase(s): All		
Total Estimated Application Services	**Hours: 2,315**	
Total Estimated Technical Systems	**Hours: 193**	
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 SUMMARY

Authorized Development (see above)	**Hours:**	
Preliminary Estimated Development for Future Phases	**Hours:**	
Grand Total Estimated Development	**Hours: 2,508**	**Cost: $413,820**

Project Name: Point of Sale Terminal Replacement RFP   **Project ID: DJ1162TR**

PROJECT COMPLETION AUTHORIZATION

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

Point of Sale Terminal Replacement RFP - Size Estimate (+/- 10% to 50%) ✕

	Type	ID	Task Name	Estimated Hours	Estimate Notes
1	Phase	000000	⊟ PROJECT MANAGEMENT	577	
2	Phase	100000	⊟ DEVELOP RFP & SELECT VENDOR	206	
3	Phase	200000	⊟ DEFINE BUSINESS REQUIREMENTS	173	
4	Phase	300000	⊟ DESIGN SYSTEM ARCHITECTURE	136	
5	Phase	500000	⊟ DEVELOP APPLICATION	782	
6	Phase	600000	⊟ IMPLEMENTATION PHASE	557	
7	Phase	800000	⊟ POST IMPLEMENTATION SUPPORT	77	
8					
1				2,508	

Oakland County -- Point of Sale Terminal Replacement

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	15,332	15,485	15,640	15,796	15,954	78,208
Costs:							
Development Services Subtotal:	413,820	5,833	5,891	5,950	6,009	6,070	443,573
Hardware Subtotal:	112,950	14,696	14,842	14,991	15,141	15,292	187,912
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	15,332	15,485	15,640	15,796	15,954	78,208
Annual Total Costs	526,770	20,528	20,734	20,941	21,150	21,362	631,485
Annual Return on Investment	(526,770)	(5,196)	(5,248)	(5,301)	(5,354)	(5,407)	(553,277)
Annual Costs/Savings Ratio	0.00%	133.89%	133.89%	133.89%	133.89%	133.89%	
Project Cumulative Statistics:							
Cumulative Total Savings	0	15,332	30,817	46,457	62,253	78,208	78,208
Cumulative Total Costs	526,770	547,298	568,032	588,973	610,123	631,485	631,485
Cumulative Return on Investment	(526,770)	(531,966)	(537,215)	(542,516)	(547,870)	(553,277)	(553,277)
Cumulative Cost/Savings Ratio	0.00%	3569.69%	1843.25%	1267.78%	980.07%	807.45%	807.45%
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:			

Oakland County -- Point of Sale Terminal Replacement

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
Reduction in Staff support for on-site custom code installations and support	Cost Avoidance		HR	92	165	15,180	1.010
Avoid support issues caused by lack of up-to-date software.	Intangible Benefit					0	
Avoid reductions in processing efficiency from delays to custom department software updates.	Intangible Benefit					0	
Avoid potential security vulnerabilities due to manual process of software updates	Intangible Benefit					0	
						0	
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Oakland County -- Point of Sale Terminal Replacement

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
Reduction in Staff support for on-site custom code installations and support	Cost Avoidance		X	X	X	X	X		15,331.80	15,485.12	15,639.97	15,796.37	15,954
Avoid support issues caused by lack of up-to-date software.	Intangible Benefit												
Avoid reductions in processing efficiency from delays to custom department software updates.	Intangible Benefit												
Avoid potential security vulnerabilities due to manual process of software updates	Intangible Benefit												

Oakland County -- Point of Sale Terminal Replacement
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:							
Reduction in Staff support for on-site custom code installations and support		15,332	15,485	15,640	15,796	15,954	78,208
Cost Avoidance Subtotal:		*15,332*	*15,485*	*15,640*	*15,796*	*15,954*	*78,208*
Intangible Benefit:							
Avoid support issues caused by lack of up-to-date software.							
Avoid reductions in processing efficiency from delays to custom department software updates.							
Avoid potential security vulnerabilities due to manual process of software updates							
Savings Total:		*15,332*	*15,485*	*15,640*	*15,796*	*15,954*	*78,208*

Oakland County -- Point of Sale Terminal Replacement

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	Y1	Y2	Y3	Y4	Y5	Y6
								Affects Project ROI?					
IT Hours - New Development	Development Svcs		HR	2,508	165	413,820		x					
IT Hours - System Maintenance	Development Svcs				165	0	1.010	x					
IT Hours - Customer Support	Development Svcs		HR	10	165	1,650	1.010		x	x	x	x	x
IT Hours - Planned Maintenance	Development Svcs		HR	25	165	4,125	1.010		x	x	x	x	x
User Hours - New Development	Development Svcs					0							
User Hours - PTNE/OT	Development Svcs					0							
Contractor Professional Services	Development Svcs		EA	15	1,500	22,500							
PC System - Acquisition	Hardware				687	0							
PC System - Maintenance	Hardware				2,936	0							
Notebook - Acquisition	Hardware				1,115	0							
Notebook - Maintenance	Hardware				3,024	0							
Tablet Notebook - Acquisition	Hardware				1,421	0							
Tablet Notebook - Maintenance	Hardware				2,800	0							
Laserprinter - Acquisition	Hardware				1,432	0							
Laserprinter - Maintenance	Hardware				1,408	0							
PC Maintenance User Owned	Hardware				2,720	0							
Printer Maintenance User Owned	Hardware				1,264	0							
File Space (100GB)	Hardware		ANN		23	0							
Vendor Point of Sale Machines - Acquisition	Hardware		EA	15	6,560	98,400		x					
Vendor Point of Sale Machines - Maintenance	Hardware		EA	15	970	14,550	1.010	x	x	x	x	x	x
Package Software - Acquisition	Software					0							
Package Software - Maintenance	Software					0							
Business Objects Access	Software					0							
Term Emulation SFTW-Acquisition	Software					0							
Term Emulation SFTW-Maintenance	Software					0							
Server - Acquisition/Upgrade	Infrastructure				8,000	0							
Server - Maintenance	Infrastructure				360	0							
Server Sftwre - Acquisition/Upgrade	Infrastructure				335	0							
Server Sftwre - Maintenance	Infrastructure					0							
Server Rack Mount	Infrastructure				400	0							
Oracle Enterprise Software Purchase - Per Processor (4 Cores) - Requires Annual Support Below	Infrastructure				42,280	0							

Oakland County -- Point of Sale Terminal Replacement

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
Oracle Enterprise Software Support - Per Processor (4 Cores)	Infrastructure				9,293	0	1.030						
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure				16,985	0							
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure				12,724	0							
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure				8,463	0							
SQL Server Enterprise - Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure				4,261	0							
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure				4,429	0							
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure				3,317	0							
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure				2,205	0							
SQL Server - Standard Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure				1,112	0							
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				3,506	0							

Oakland County -- Point of Sale Terminal Replacement
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
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				701	0							
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				13,180	0							
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				2,635	0							
SSL Certificate	Infrastructure				845	0							
Internet Access	Infrastructure				180	0							
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure		ANN		500	0							
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure		ANN		415	0							
Dedicated Virtual Server	Infrastructure		ANN		4,150	0							
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = N/A	Infrastructure		ANN			0							
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $951 On Premise Physical Server = $9,288	Infrastructure		ANN			0							
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $1,702 On Premise Physical Server = $9,751	Infrastructure		ANN			0							
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $3,167 On Premise Physical Server = $10,446	Infrastructure		ANN			0							

Oakland County -- Point of Sale Terminal Replacement

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
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $12,906	Infrastructure		ANN			0							

Oakland County -- Point of Sale Terminal Replacement

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs	413,820.00					
IT Hours - System Maintenance	Development Svcs	0.00					
IT Hours - Customer Support	Development Svcs		1,666.50	1,683.17	1,700.00	1,717.00	1,734.17
IT Hours - Planned Maintenance	Development Svcs		4,166.25	4,207.91	4,249.99	4,292.49	4,335.42
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						
Vendor Point of Sale Machines - Acquisition	Hardware	98,400.00					
Vendor Point of Sale Machines - Maintenance	Hardware	14,550.00	14,695.50	14,842.46	14,990.88	15,140.79	15,292.20
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						

Oakland County -- Point of Sale Terminal Replacement

Return on Investment Analysis

Cost Detail

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

Oakland County -- Point of Sale Terminal Replacement

Return on Investment Analysis

Cost Detail

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

Oakland County -- Point of Sale Terminal Replacement

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $12,906	Infrastructure						

Oakland County -- Point of Sale Terminal Replacement

Date: 08/10/2020

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	413,820						413,820
IT Hours - System Maintenance	0						
IT Hours - Customer Support		1,667	1,683	1,700	1,717	1,734	8,501
IT Hours - Planned Maintenance		4,166	4,208	4,250	4,292	4,335	21,252
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
Development Services Subtotal:	*413,820*	*5,833*	*5,891*	*5,950*	*6,009*	*6,070*	*443,573*
Hardware:							
Vendor Point of Sale Machines - Acquisition	98,400						98,400
Vendor Point of Sale Machines - Maintenance	14,550	14,696	14,842	14,991	15,141	15,292	89,512
Hardware Subtotal:	*112,950*	*14,696*	*14,842*	*14,991*	*15,141*	*15,292*	*187,912*
Software:							
Software Subtotal:							
Infrastructure:							
Infrastructure Subtotal							
Training:							

Oakland County -- Point of Sale Terminal Replacement

Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	*526,770*	*20,528*	*20,734*	*20,941*	*21,150*	*21,362*	*631,485*

Oakland County -- Point of Sale Terminal Replacement

Return on Investment Analysis

Assumptions

Date	Assumption Description
14-Jul-20	Reduction in Staff support for on-site custom code installations and support related to standard out-of-the-box software on all POS machines that is updated remotely.
14-Jul-20	POS machine HW cost and professional services based on single POS replacement estimate for the Clerks Office
14-Jul-20	POS machine maintenance costs based on current maintenance cost of $970/machine
14-Jul-20	15 POS machines need to be replaced across the following departments (Circuit Court - 2, South Health - 2, Animal Control - 2, EDCA - 1, Clerk's Office - 3, North Health - 2, OC Sheriff Office - 1, Treasurer - 1, IT - test machine)
21-Jul-20	Annual support hours of 116 hour will be reduced by 80%