Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Health Kiosk Replacement   **Project ID: D99161KR**

Leadership Group: Finance and Administration	
Department: Health and Human Services	**Division:** Admin
Project Sponsor: Leigh-Anne Stafford	**Date Requested:** 2/26/18 **PM Customer No.** 161

Request Type: ***New Development***   Enhancement   Customer Support
Planned System Maintenance or Upgrade

IT Team Name: Assessing and Taxation	**IT Team No:** 9

Project Manager/Leader: Scott Kaiser

Account Number: 96842	**Account Description:** Health Administration	**Customer Name:** Health
Grant Funded? Yes **No**	**Mandate?** Yes **No** **Mandate Source:**	

Project Goal

To implement a one stop kiosk for Public Health (STD, immunizations, etc.) and Environmental (well, septic, water testing) services so that public facing apps are centralized and integrated into a single service and self-registration location and will allow walk-in appointments, text notification appointment updates, notices for test result availability, and appointment reminders.

Business Objective

Allow clients to register and receive notifications through one system that will integrate with clinic and Environmental Health (EH) products and enhance our ability to communicate with clients on wait times and services.

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
- Implemented self-service solution
- Training/User Manual(s)
- Application Code
- Service Level Agreement
- Disaster Recovery Toolkit
- Service Center Knowledge Documents

Project Name: Health Kiosk Replacement   **Project ID: D99161KR**

Approach
- Review current business process and conduct needs assessment with customer, ensuring current manual processes are refined and automated.
- 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
- Implement new system
- Develop User Acceptance Test Plan
- Test new system
- 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
- Retire existing hardware

Research & Analysis

Gartner Research Recommendation

Gartner identified a prioritized action plan for the future state of health care providers. Kiosks were given a low priority, meaning they are important and should be implemented. However, the deployment is not critical in the early years of the organizations plan. In general, they are an operational tool beneficial for improving customer experience.

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users: In 2017 over 27,660 clients received clinic services that required kiosk registration. Including EH services would increase this number on a yearly basis.

Divisions: Health Division

Leadership Groups: Finance and Administration

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Health Kiosk Replacement   **Project ID: D99161KR**

Risk

Business Environment   High - Project will dramatically change existing business processes or will negatively affect the business environment if implementation is unsuccessful.

Technical Environment   High - New or non-standard technology.

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:	Leigh-Anne Stafford	As Needed

Facilities

- None

Technical

- None

Funding

- Information Technology

Other

- N/A

Priority

Project Name: Health Kiosk Replacement   **Project ID: D99161KR**

- TBD

Constraints

- N/A

Exclusions

- N/A

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Health Kiosk Replacement   **Project ID: D99161KR**

PROJECT PHASE AUTHORIZATION

Phase(s): All		
Total Estimated Application Services	**Hours:** 1,377	
Total Estimated Technical Systems	**Hours:** 344	
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: 1,721**	**Cost: $283,965**

Project Name: Health Kiosk Replacement   **Project ID: D99161KR**

PROJECT COMPLETION AUTHORIZATION

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

Health Kiosk Replacement - Size Estimate (+/- 10% to 50%)

	Type	ID	Task Name	Estimated	Estimate Notes
1				Hours	
2					
3	3	000000	PROJECT MANAGEMENT	466	
4	Phase	100000	DEVELOP RFP & SELECT VENDOR	351	
5	Phase	200000	BUSINESS REQUIREMENTS		
6	Phase	300000	DESIGN SYSTEM ARCHITECTURE	125	
7	Phase	400000	IMPLEMENT VENDOR APPLICATION	560	
8	Phase	500000	IMPLEMENTATION PHASE	99	
9	Phase	600000	POST IMPLEMENTATION SUPPORT	120	
10				1,721	

Oakland County -- Health Kiosk 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:	49,692	50,686	51,700	52,734	53,788	54,864	313,463
Costs:							
Development Services Subtotal:	283,965	11,550	18,150	11,550	18,150	11,550	354,915
Hardware Subtotal:	36,000	0	0	0	0	0	36,000
Software Subtotal:	60,000	6,000	6,000	6,000	6,000	6,000	90,000
Infrastructure Subtotal	5,641	4,543	4,543	4,543	4,543	4,543	28,356
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
Annual Statistics:							
Annual Total Savings	49,692	50,686	51,700	52,734	53,788	54,864	313,463
Annual Total Costs	385,606	22,093	28,693	22,093	28,693	22,093	509,271
Annual Return on Investment	(335,914)	28,593	23,007	30,641	25,095	32,771	(195,808)
Annual Costs/Savings Ratio	775.99%	43.59%	55.50%	41.90%	53.34%	40.27%	
Project Cumulative Statistics:							
Cumulative Total Savings	49,692	100,378	152,077	204,811	258,599	313,463	313,463
Cumulative Total Costs	385,606	407,699	436,392	458,485	487,178	509,271	509,271
Cumulative Return on Investment	(335,914)	(307,321)	(284,315)	(253,674)	(228,579)	(195,808)	(195,808)
Cumulative Cost/Savings Ratio	775.99%	406.16%	286.95%	223.86%	188.39%	162.47%	162.47%
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 -- Health Kiosk 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
Aging hardware and extensive use of the system requires replacement of expensive parts, new device would eleminate this continuous problem.	Cost Avoidance		EA	9	1,916	17,244	1.020
Health User Support Specialists conduct analysis of the units each time they have an error.	Cost Avoidance		HR	520	33	17,160	1.020
IT CRM and Developer must manage all aspects of the project from working with two separate vendors, Health Division staff and Workstation services.	Cost Avoidance		HR	104	147	15,288	1.020
Allow clients to register for a variety of services that will integrate with new project management software system. One streamlined process for clients and staff.	Intangible Benefit					0	
						0	
						0	
						0	
						0	

Oakland County -- Health Kiosk 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
Aging hardware and extensive use of the system requires replacement of expensive parts, new device would eleminate this continuous problem.	Cost Avoidance	X	X	X	X	X	X	17,244.00	17,588.88	17,940.66	18,299.47	18,665.46	19,039
Health User Support Specialists conduct analysis of the units each time they have an error.	Cost Avoidance	X	X	X	X	X	X	17,160.00	17,503.20	17,853.26	18,210.33	18,574.54	18,946
IT CRM and Developer must manage all aspects of the project from working with two separate vendors, Health Division staff and Workstation services.	Cost Avoidance	x	x	x	x	x	x	15,288.00	15,593.76	15,905.64	16,223.75	16,548.22	16,879
Allow clients to register for a variety of services that will integrate with new project management software system. One streamlined process for clients and staff.	Intangible Benefit												

Oakland County -- Health Kiosk 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:							
Aging hardware and extensive use of the system requires replacement of expensive parts, new device would eleminate this continuous problem.	17,244	17,589	17,941	18,299	18,665	19,039	108,777
Health User Support Specialists conduct analysis of the units each time they have an error.	17,160	17,503	17,853	18,210	18,575	18,946	108,247
IT CRM and Developer must manage all aspects of the project from working with two separate vendors, Health Division staff and Workstation services.	15,288	15,594	15,906	16,224	16,548	16,879	96,439
Cost Avoidance Subtotal:	*49,692*	*50,686*	*51,700*	*52,734*	*53,788*	*54,864*	*313,463*
Intangible Benefit:							
Allow clients to register for a variety of services that will integrate with new project management software system. One streamlined process for clients and staff.							
Savings Total:	*49,692*	*50,686*	*51,700*	*52,734*	*53,788*	*54,864*	*313,463*

Oakland County -- Health Kiosk Replacement

As Of: 2/26/18

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
IT Hours - New Development	Development Svcs		HR	1,721	165	283,965		x					
IT Hours - System Maintenance	Development Svcs		HR	30	165	4,950			x	x	x	x	x
IT Hours - Customer Support	Development Svcs		HR	40	165	6,600			x	x	x	x	x
IT Hours - Planned Maintenance	Development Svcs		HR	40	165	6,600				x		x	
User Hours - New Development	Development Svcs					0							
User Hours - PTNE/OT	Development Svcs					0							
Contractor Professional Services	Development Svcs					0							
Kiosk Hardware - Acquisition	Hardware		EA	12	3,000	36,000		x					
PC System - Acquisition	Hardware				814	0							
PC System - Maintenance	Hardware				2,304	0							
Notebook - Acquisition	Hardware				1,223	0							
Notebook - Maintenance	Hardware				2,372	0							
Tablet Notebook - Acquisition	Hardware				2,012	0							
Tablet Notebook - Maintenance	Hardware					0							
Laserprinter - Acquisition	Hardware				1,432	0							
Laserprinter - Maintenance	Hardware				1,104	0							
Image Workstations - Acquisition	Hardware					0							
Image Workstations - Maintenance	Hardware				3,496	0							
PC Maintenance User Owned	Hardware				2,304	0							
Printer Maintenance User Owned	Hardware				1,072	0							
File Space (100GB)	Hardware		ANN		173	0							
Internet Bandwidth per MB	Hardware		ANN		750	0							
Kiosk Software - Acquisition	Software		EA	12	5,000	60,000		x					
Kiosk Software - Annual Licensing	Software		EA	12	500	6,000			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							

Oakland County -- Health Kiosk 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 Per Processor - Includes Year 1 Maintenance	Infrastructure				21,372	0							
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure				3,432	0							
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure				24,533	0							
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure				20,759	0							
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure				16,985	0							
SQL Server Enterprise - Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure				4,218	0							
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure				6,398	0							
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure			3	5,414	16,242		x					
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure				4,429	0							
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure			3	1,100	3,300				x	x	x	x

Oakland County -- Health Kiosk Replacement

As Of: 2/26/18

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 - Includes Year 1 Maintenance	Infrastructure				3,506	0							
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				701	0							
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				13,180	0							
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				2,635	0							
SSL Certificate	Infrastructure		ANN	2	845	1,690		x	x	x	x	x	x
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							
Database (5 GB) on Consolidated SQL Instance Server	Infrastructure		ANN		930	0							
Database Instance (125 GB DB) on Consolidated SQL Server	Infrastructure		ANN		2,395	0							
Database SQL Maint Server	Infrastructure		ANN		834	0							
Database SQL Server Physical	Infrastructure		ANN		19,158	0							
DB Maintenance (Annual Cycle $610)	Infrastructure		ANN		610	0							
DB Maintenance (Semi-Annual Cycle $1220)	Infrastructure		ANN		1,220	0							
DB Maintenance (Semi-Annual Cycle $2440)	Infrastructure		ANN		2,440	0							
Dedicated Virtual Server	Infrastructure		ANN		4,150	0							
DB Instance Setup	Infrastructure				976	0							
DBA MS SQL Database Creation on Exisitng Instance	Infrastructure			3	366	1,098		x					

Oakland County -- Health Kiosk 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 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	3	951	2,853		x	x	x	x	x	x
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							
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $12,906	Infrastructure		ANN			0							
Project Staff Training	Training					0							
User Training	Training					0							

Oakland County -- Health Kiosk 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	283,965					
IT Hours - System Maintenance	Development Svcs		4,950	4,950	4,950	4,950	4,950
IT Hours - Customer Support	Development Svcs		6,600	6,600	6,600	6,600	6,600
IT Hours - Planned Maintenance	Development Svcs			6,600		6,600	
User Hours - New Development	Development Svcs						
User Hours - PTNE/OT	Development Svcs						
Contractor Professional Services	Development Svcs						
Kiosk Hardware - Acquisition	Hardware	36,000					
PC System - Acquisition	Hardware						
PC System - Maintenance	Hardware						
Notebook - Acquisition	Hardware						
Notebook - Maintenance	Hardware						
Tablet Notebook - Acquisition	Hardware						
Tablet Notebook - Maintenance	Hardware						
Laserprinter - Acquisition	Hardware						
Laserprinter - Maintenance	Hardware						
Image Workstations - Acquisition	Hardware						
Image Workstations - Maintenance	Hardware						
PC Maintenance User Owned	Hardware						
Printer Maintenance User Owned	Hardware						
File Space (100GB)	Hardware						
Internet Bandwidth per MB	Hardware						
Kiosk Software - Acquisition	Software	60,000					
Kiosk Software - Annual Licensing	Software		6,000	6,000	6,000	6,000	6,000
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						

Oakland County -- Health Kiosk Replacement

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure						
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2018-Aug 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 (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure	16,242					
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure			3,300	3,300	3,300	3,300

Oakland County -- Health Kiosk 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 - Includes Year 1 Maintenance	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						
SSL Certificate	Infrastructure	1,690	1,690	1,690	1,690	1,690	1,690
Internet Access	Infrastructure						
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure						
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure						
Database (5 GB) on Consolidated SQL Instance Server	Infrastructure						
Database Instance (125 GB DB) on Consolidated SQL Server	Infrastructure						
Database SQL Maint Server	Infrastructure						
Database SQL Server Physical	Infrastructure						
DB Maintenance (Annual Cycle $610)	Infrastructure						
DB Maintenance (Semi-Annual Cycle $1220)	Infrastructure						
DB Maintenance (Semi-Annual Cycle $2440)	Infrastructure						
Dedicated Virtual Server	Infrastructure						
DB Instance Setup	Infrastructure						
DBA MS SQL Database Creation on Exisitng Instance	Infrastructure	1,098					

Oakland County -- Health Kiosk Replacement

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
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	2,853	2,853	2,853	2,853	2,853	2,853
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						
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $12,906	Infrastructure						
Project Staff Training	Training						
User Training	Training						

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	283,965						283,965
IT Hours - System Maintenance		4,950	4,950	4,950	4,950	4,950	24,750
IT Hours - Customer Support		6,600	6,600	6,600	6,600	6,600	33,000
IT Hours - Planned Maintenance			6,600		6,600		13,200
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
Development Services Subtotal:	*283,965*	*11,550*	*18,150*	*11,550*	*18,150*	*11,550*	*354,915*
Hardware:							
Kiosk Hardware - Acquisition	36,000						36,000
Hardware Subtotal:	*36,000*						*36,000*
Software:							
Kiosk Software - Acquisition	60,000						60,000
Kiosk Software - Annual Licensing	0	6,000	6,000	6,000	6,000	6,000	30,000
Software Subtotal:	*60,000*	*6,000*	*6,000*	*6,000*	*6,000*	*6,000*	*90,000*
Infrastructure:							
SSL Certificate	1,690	1,690	1,690	1,690	1,690	1,690	10,140
DBA MS SQL Database Creation on Exisitng Instance	1,098						1,098
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $951 On Premise Physical Server = $9,288	2,853	2,853	2,853	2,853	2,853	2,853	17,118
Infrastructure Subtotal	*5,641*	*4,543*	*4,543*	*4,543*	*4,543*	*4,543*	*28,356*
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	*385,606*	*22,093*	*28,693*	*22,093*	*28,693*	*22,093*	*509,271*

Oakland County -- Health Kiosk Replacement

Return on Investment Analysis

Assumptions

Date	Assumption Description
14-Mar-18	Average of 2 kiosks down at any given time. Currently 2 are down due to hardware problems. Average 2 screen replacements a year.
14-Mar-18	Health User Support Specialist and IT Contractor conduct analysis on the units. On average, one is broken per week at 10 hours of work per unit. Sometimes several are down at once and other times we are waiting for hardware
14-Mar-18	IT Project Manager required to track equipment from vendor, internal review of software from Workstation Services and software upgrades from vendor - Estimated 5 hours per week on average spent on the kiosks. Assuming a ~50% reduction.
24-May-18	Hardware and software costs were sourced from http://www.costowl.com/b2b/kiosks-touch-screen-cost.html