Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Veterans Services Soldier Relief Database **Project ID: DJ9173SR**

Leadership Group: Finance/Administration				
Department: Public Services		**Division:** Veterans Services		
Project Sponsor: Garth Wootten	**Date Requested**: 3/14/18		**PM Customer No.** 173	
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: Eric McGhee				
Account Number: 95650	**Account Description:**	VETERANS SERVICES-EQUIPMENT	**Customer Name:**	VETERANS SERVICES
Grant Funded? Yes	**No**	**Mandate?**	**Yes**	**No**
		Mandate Source:		

Project Goal

To update the Veterans Soldiers Relief Program so that newer technology can be utilized which will provide additional functionality and automate current manual compilation of statistics for the Annual Report and provide efficiencies in the overall workflow process.

Business Objective

Create a new method for keeping track of Soldiers Relief expenditures and reporting used in Veterans Services Division Annual Reports. Make the system is user friendly so that fewer hours are needed to provide emergency assistance to Oakland County Veterans and the possibility of errors are reduced. Upgrade to the latest software so that the possibility of lost data is reduced.

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

Approach

- Develop Detailed Project Plan
- 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
- Develop 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

Research & Analysis

Gartner Research Recommendation

- Research yielded no results

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users 12

Divisions Veterans Services

Leadership Groups Finance Administration

Project Name: Veterans Services Soldier Relief Database **Project ID: DJ9173SR**

Risk

Business Environment Low - Little or no impact 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:	Garth Wootten	As Needed

Facilities

- None

Technical

-

Funding

- Information Technology

Other

- None

Priority

- TBD

Constraints

- None

Exclusions

- None

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Veterans Services Soldier Relief Database **Project ID: DJ9173SR**

PROJECT PHASE AUTHORIZATION

Phase(s):		
Total Estimated Application Services	**Hours: 520**	
Total Estimated Technical Systems	**Hours: 30**	
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: 550**	
Preliminary Estimated Development for Future Phases	**Hours:**	
Grand Total Estimated Development	**Hours: 550**	**Cost: $90,750**

Oakland County
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Project Scope and Approach

Project Name: Veterans Services Soldier Relief Database **Project ID: DJ9173SR**

PROJECT COMPLETION AUTHORIZATION

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

Veterans Services Soldier Relief Database - Size Estimate (+/- 10% to 50%)

	Type	ID	Task Name	Estimated Hours	Estimate Notes
3	3	000000	PROJECT MANAGEMENT	138	
4	Phase	030000	BUSINESS AREA REQUIREMENTS	47	
5	Phase	040000	BUSINESS SYSTEM DESIGN		
6	Phase	050000	TECHNICAL DESIGN	30	
7	Phase	060000	PROGRAMMING	259	
8	Phase	070000	IMPLEMENTATION	60	
9	Phase	080000	POST IMPLEMENTATION SUPPORT	16	
10				550	

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Oakland County -- Veterans Services Soldier Relief Database

As Of: 3/14/2018

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:	2,450	2,450	2,450	2,450	2,450	2,450	14,700
Costs:							
Development Services Subtotal:	90,750	0	0	0	0	0	90,750
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	0	0	0	0	0	0	0
Infrastructure Subtotal	4,429	0	0	0	0	0	4,429
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
Annual Statistics:							
Annual Total Savings	2,450	2,450	2,450	2,450	2,450	2,450	14,700
Annual Total Costs	95,179	0	0	0	0	0	95,179
Annual Return on Investment	(92,729)	2,450	2,450	2,450	2,450	2,450	(80,479)
Annual Costs/Savings Ratio	3884.86%	0.00%	0.00%	0.00%	0.00%	0.00%	
Project Cumulative Statistics:							
Cumulative Total Savings	2,450	4,900	7,350	9,800	12,250	14,700	14,700
Cumulative Total Costs	95,179	95,179	95,179	95,179	95,179	95,179	95,179
Cumulative Return on Investment	(92,729)	(90,279)	(87,829)	(85,379)	(82,929)	(80,479)	(80,479)
Cumulative Cost/Savings Ratio	3884.86%	1942.43%	1294.95%	971.21%	776.97%	647.48%	647.48%
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:			

REV: January 22, 2018

Oakland County -- Veterans Services Soldier Relief Database

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
Avoid duplication of work by eliminating multliple data entry points. Based on 15 minutes times 160 applications	Cost avoidance			40	55	2,200	1.000
Avoid loss of data by ensuring system is updated and has proper backup	Intangible Benefit						
Automatically prepare reports needed for Annual Report to BOC	Cost Avoidance			5	40	200	1.000
Simplify and improve navigation ease of use	Intangible Benefit					0	
Increase the degree to which the software can be used by specified users to achieve quantified objectives with effectiveness, efficiency, and satisfaction in a quantified context of use.	Intangible Benefit					0	
Migrate old Access technology to the latest release of Access.	Intangible Benefit					0	
						0	

Oakland County -- Veterans Services Soldier Relief Database

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Affects Project ROI? Y1	Y2	Y3	Y4	Y5	Y6	Potential Savings Extensions Y1	Y2	Y3	Y4	Y5	Y6
Avoid duplication of work by eliminating multliple data entry points. Based on 15 minutes times 160 applications	Cost avoidance	x	x	x	x	x	x	2,200.00	2,200.00	2,200.00	2,200.00	2,200.00	2,200
Avoid loss of data by ensuring system is updated and has proper backup	Intangible Benefit												
Automatically prepare reports needed for Annual Report to BOC	Cost Avoidance	x	x	x	x	x	x	200.00	200.00	200.00	200.00	200.00	200
Simplify and improve navigation ease of use	Intangible Benefit												
Increase the degree to which the software can be used by specified users to achieve quantified objectives with effectiveness, efficiency, and satisfaction in a quantified context of use.	Intangible Benefit												
Migrate old Access technology to the latest release of Access.	Intangible Benefit												

Oakland County -- Veterans Services Soldier Relief Database

As Of: 3/14/2018

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:								
	Avoid duplication of work by eliminating multliple data entry points. Based on 15 minutes times 160 applications	2,200	2,200	2,200	2,200	2,200	2,200	13,200
	Automatically prepare reports needed for Annual Report to BOC	200	200	200	200	200	200	1,200
	Simplify and improve navigation ease of use							
	Cost Avoidance Subtotal:	***2,400***	***2,400***	***2,400***	***2,400***	***2,400***	***2,400***	***14,400***
Intangible Benefit:								
	Avoid loss of data by ensuring system is updated and has proper backup							
	Increase the degree to which the software can be used by specified users to achieve quantified objectives with effectiveness, efficiency, and satisfaction in a quantified context of use.							
	Migrate old Access technology to the latest release of Access.							
	0							
Savings Total:		***2,400***	***2,400***	***2,400***	***2,400***	***2,400***	***2,400***	***14,400***

Oakland County -- Veterans Services Soldier Relief Database

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
IT Hours - New Development	Development Svcs			550	165	90,750		x					
IT Hours - System Maintenance	Development Svcs				147	0							
IT Hours - Customer Support	Development Svcs				147	0							
IT Hours - Planned Maintenance	Development Svcs				147	0							
User Hours - New Development	Development Svcs					0							
User Hours - PTNE/OT	Development Svcs					0							
Contractor Professional Services	Development Svcs					0							
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							
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 Per Processor - Includes Year 1 Maintenance	Infrastructure				21,372	0							
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure				3,432	0							

Oakland County -- Veterans Services Soldier Relief Database

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
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				5,414	0							
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure			1	4,429	4,429		x					
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure				1,100	0							
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				3,506	0							

Oakland County -- Veterans Services Soldier Relief Database

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							
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				366	0							
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = N/A	Infrastructure		ANN			0							

Oakland County -- Veterans Services Soldier Relief Database

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
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							
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 -- Veterans Services Soldier Relief Database

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	90,750.00					
IT Hours - System Maintenance	Development Svcs						
IT Hours - Customer Support	Development Svcs						
IT Hours - Planned Maintenance	Development Svcs						
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						
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						
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 Per Processor - Includes Year 1 Maintenance	Infrastructure						
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure						

Oakland County -- Veterans Services Soldier Relief Database

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
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						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure	4,429.00					
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						

Oakland County -- Veterans Services Soldier Relief Database

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						
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						
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = N/A	Infrastructure						

Oakland County -- Veterans Services Soldier Relief Database

Return on Investment Analysis

Cost Detail

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

Oakland County -- Veterans Services Soldier Relief Database

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	90,750						90,750
IT Hours - System Maintenance							
IT Hours - Customer Support							
IT Hours - Planned Maintenance							
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
Development Services Subtotal:	***90,750***						***90,750***
Hardware:							
Hardware Subtotal:							
Software:							
Software Subtotal:							
Infrastructure:							
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	4,429						4,429
Infrastructure Subtotal	***4,429***						***4,429***
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	***95,179***						***95,179***

Oakland County -- Veterans Services Soldier Relief Database

Return on Investment Analysis

Assumptions

Date	Assumption Description
14-Mar-18	Savings Detail - Automate the printing of checks so that costs would not be incurred with manual completion of checks: This is the estimate for the purchase of checks from the bank.
14-Jun-18	Veteran's Services will NOT be able to print checks based on the MS Access-to-SQL conversion and will require additional hardware, software, and licensing
14-Jun-18	Hours breakdown is as follows: Core work at 288 hours (including 20 DBA and 10 SA hours), PM and contigency at 165 hours, and Pre/Post Implementation at 97 hours
15-Jun-18	Treasurer's Office estimated ~$40,000 for the cost of BottomLine licenses and MICR printers
15-Jun-18	Security Team has asked for 4 hours to perform security scans