

Oakland County Department of Information Technology Project Scope and Approach

Project Name: CAMS Public Request Portal

Project ID: D11182RP

Leadership Group: Land			
Department: Information Technology		Division: Application Services	
Project Sponsor: Tammi Shepherd	Date Requested: 2/18/2020	PM Customer No. 182	
Request Type: <u>New Development</u> <i>Enhancement</i> <i>Customer Support</i> <i>Planned System Maintenance or Upgrade</i>			
IT Team Name: Infrastructure and GIS		IT Team No: 1	
Project Manager/Leader: Dennis Faustich			
Account Number: 65901	Account Description: CAMS	Customer Name:	Collaborative Asset Management System
Grant Funded?	Yes <u>No</u>	Mandate?	Yes <u>No</u>
		Mandate Source:	

Project Goal

To implement a public request portal system so that Oakland County CAMS participants can engage local residents, improve and expand data collection and maximize workflow efficiencies through an integrated solution.

Business Objective

Engage local communities and residents by implementing a mobile-friendly public request portal solution that integrates with the Oakland County Collaborative Asset Management System.

Major Deliverables

- Detailed Project Plan
- Gather Application and System Requirements
 - End User Hardware and Software Requirements Document
 - System Design Document
 - Application Architecture Diagram
- Install and Configure Vendor software
- Design and Implement County Boundary GIS layer
- User Training Plan
- User Acceptance Test Plan
- Implementation Plan
- Training/User Manual(s)
- Disaster Recovery Toolkit
- Service Center Knowledge Documents

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- Implement into Production

Approach

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

Research & Analysis

Gartner Research Recommendation - Search yielded no results

Benefits

See *Return on Investment (ROI) Analysis Document*

Impact

Number of Users	CAMS Users and Public
Divisions	WRC, RCOC, Facilities Maintenance, City of Auburn Hills City of Farmington Hills and City of Ferndale
Leadership Groups	Land

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Risk

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

Technical Environment Medium - Previously implemented technologies with new aspects and/or new requirements.

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:

<u>Role:</u>	<u>Name</u>	<u>Hours per Day</u>
Project Sponsor:	Tammi Shepherd	As Needed

Facilities

-

Technical

- Project will utilize Esri's Crowdsourcing application along with Cityworks' WebHooks functionality.
- Cityworks Web Hook functionality requires CAMS to be at v15.x or higher

Funding

- Funded – CAMS Program

Other

-

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Priority

Constraints

-
-

Exclusions

- The implemented solution is for requests only within the Oakland County borders and for the participating departments and CVTs that utilize the Oakland County CAMS Application
- System will only support Non-emergency requests

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PROJECT PHASE AUTHORIZATION

Phase(s):	
Total Estimated Application Services	Hours: 766
Total Estimated Technical Systems	Hours: 22
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:
Previously Authorized Development	Hours:
Preliminary Estimated Development for Future Phases	Hours:
Grand Total Estimated Development	Hours: 788 Cost: \$130,020

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PROJECT COMPLETION AUTHORIZATION

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

CAMS Public Request Portal - Size Estimate (+/- 10% to 50%)

1	Type	ID	Task Name	Estimated	Estimate Notes
2				Hours	
3		000000	PROJECT MANAGEMENT	211	
4	Phase	200000	DEFINE BUSINESS REQUIREMENTS	53	
5	Phase	300000	DESIGN SYSTEM ARCHITECTURE	24	
6	Phase	500000	DEVELOP APPLICATION	340	
7	Phase	600000	IMPLEMENTATION PHASE	114	
8	Phase	800000	POST IMPLEMENTATION SUPPORT	46	
9				788	

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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:	5,200	5,200	5,200	5,200	5,200	5,200	31,200
Costs:							
Development Services Subtotal:	146,520	0	0	0	0	0	146,520
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	5,200	5,200	5,200	5,200	5,200	5,200	31,200
Annual Total Costs	146,520	0	0	0	0	0	146,520
Annual Return on Investment	(141,320)	5,200	5,200	5,200	5,200	5,200	(115,320)
Annual Costs/Savings Ratio	2817.69%	0.00%	0.00%	0.00%	0.00%	0.00%	
Project Cumulative Statistics:							
Cumulative Total Savings	5,200	10,400	15,600	20,800	26,000	31,200	31,200
Cumulative Total Costs	146,520	146,520	146,520	146,520	146,520	146,520	146,520
Cumulative Return on Investment	(141,320)	(136,120)	(130,920)	(125,720)	(120,520)	(115,320)	(115,320)
Cumulative Cost/Savings Ratio	2817.69%	1408.85%	939.23%	704.42%	563.54%	469.62%	469.62%
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:	_____		

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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
Improves communication with local residents	Intangible Benefit					0	
Expands data collection and analysis of assets	Intangible Benefit					0	
Centralizes and streamlines work management	Intangible Benefit					0	
RCOC's Call Center will save approximately 1 hr /day (260 hrs /yr) by reducing the amount of phone calls and emails received from residents.	Cost Avoidance		HR	260	20	5,200	
WRC staff will save a, to be determined, amount of time by reducing the amount of phone calls and email received from residents.	Intangible Benefit					0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	

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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
Improves communication with local residents	Intangible Benefit	x	x	x	x	x	x	0.00	0.00	0.00	0.00	0.00	0.00
Expands data collection and analysis of assets	Intangible Benefit	x	x	x	x	x	x	0.00	0.00	0.00	0.00	0.00	0.00
Centralizes and streamlines work management	Intangible Benefit	x	x	x	x	x	x	0.00	0.00	0.00	0.00	0.00	0.00
RCOC's Call Center will save approximately 1 hr /day (260 hrs /yr) by reducing the amount of phone calls and emails received from residents.	Cost Avoidance	x	x	x	x	x	x	5,200.00	5,200.00	5,200.00	5,200.00	5,200.00	5,200.00
WRC staff will save a, to be determined, amount of time by reducing the amount of phone calls and email received from residents.	Intangible Benefit												

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Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
<i>Tangible Benefits Subtotal:</i>							
Cost Avoidance:							
RCOC's Call Center will save approximately 1 hr /day (260 hrs /yr) by reducing the amount of phone calls and emails received from residents.	5,200	5,200	5,200	5,200	5,200	5,200	31,200
<i>Cost Avoidance Subtotal:</i>	5,200	5,200	5,200	5,200	5,200	5,200	31,200
Intangible Benefit:							
Improves communication with local residents							
Expands data collection and analysis of assets							
Centralizes and streamlines work management							
WRC staff will save a, to be determined, amount of time by reducing the amount of phone calls and email received from residents.							
Savings Total:	5,200	5,200	5,200	5,200	5,200	5,200	31,200

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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		HR	788	165	130,020	1.000	x						
IT Hours - System Maintenance	Development Svcs		HR	25	165	4,125		x						
IT Hours - Customer Support	Development Svcs		HR	50	165	8,250		x						
IT Hours - Planned Maintenance	Development Svcs		HR	25	165	4,125		x						
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								
Package Software - Acquisition	Software		EA			0								
Package Software - Acquisition Implementation	Software		EA			0								
Package Software - Maintenance	Software		ANN			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								
MS SQL Server Standard Per Processor - Includes Year 1 Maintenance	Infrastructure				4,725	0								

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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
MS SQL Server Standard Per Processor - Year 2 and Beyond	Infrastructure				946	0							
MS SQL Server Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure				19,693	0							
MS SQL Server Enterprise Per Processor - Year 2 and Beyond	Infrastructure				3,939	0							
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				845	0							
Internet Access	Infrastructure				180	0							
Project Staff Training	Training					0							
User Training	Training					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							

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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		
DB Maintenance (Semi-Annual Cycle \$2440)	Infrastructure		ANN		2,440	0									
Dedicated Virtual Server	Infrastructure		ANN		4,150	0									
File Space (100GB)	Hardware		ANN		173	0									
Internet Bandwidth per MB	Hardware		ANN		750	0									
DB Instance Setup	Infrastructure				976	0									
DBA MS SQL Database Creation on Existing Instance	Infrastructure				366	0									
DBA MS SQL Installation and Instance Creation (10hrs)	Infrastructure				1,220	0									
DBA MS SQL Instance Creation on Consolidated or Existing Server (8hrs)	Infrastructure				976	0									
Server Admin App Code Virtual Directory Setup (1hr)	Infrastructure				122	0									
Server Admin Install Physical Server / Install OS (12hrs)	Infrastructure				1,464	0									
Server Admin Virtual Machine Creation (5hrs)	Infrastructure				610	0									

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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs	130,020.00					
IT Hours - System Maintenance	Development Svcs	4,125.00					
IT Hours - Customer Support	Development Svcs	8,250.00					
IT Hours - Planned Maintenance	Development Svcs	4,125.00					
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						
Package Software - Acquisition	Software						
Package Software - Acquisition Implementation	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						
MS SQL Server Standard Per Processor - Includes Year 1 Maintenance	Infrastructure						

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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
MS SQL Server Standard Per Processor - Year 2 and Beyond	Infrastructure						
MS SQL Server Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure						
MS SQL Server Enterprise Per Processor - Year 2 and Beyond	Infrastructure						
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						
Internet Access	Infrastructure						
Project Staff Training	Training						
User Training	Training						
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						

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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
DB Maintenance (Semi-Annual Cycle \$2440)	Infrastructure						
Dedicated Virtual Server	Infrastructure						
File Space (100GB)	Hardware						
Internet Bandwidth per MB	Hardware						
DB Instance Setup	Infrastructure						
DBA MS SQL Database Creation on Existing Instance	Infrastructure						
DBA MS SQL Installation and Instance Creation (10hrs)	Infrastructure						
DBA MS SQL Instance Creation on Consolidated or Existing Server (8hrs)	Infrastructure						
Server Admin App Code Virtual Directory Setup (1hr)	Infrastructure						
Server Admin Install Physical Server / Install OS (12hrs)	Infrastructure						
Server Admin Virtual Machine Creation (5hrs)	Infrastructure						

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Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Development Services:							
IT Hours - New Development	130,020						130,020
IT Hours - System Maintenance	4,125						4,125
IT Hours - Customer Support	8,250						8,250
IT Hours - Planned Maintenance	4,125						4,125
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
<i>Development Services Subtotal:</i>	146,520						146,520
Hardware:							
<i>Hardware Subtotal:</i>							
Software:							
<i>Software Subtotal:</i>							
Infrastructure:							
<i>Infrastructure Subtotal</i>							
Training:							
<i>Training Subtotal:</i>							
Other:							
<i>Other Subtotal:</i>							
Costs Total:	146,520						146,520

