

Oakland County Department of Information Technology Project Scope and Approach

Project Name: CAMS Public Request Portal 2023-2024

Project ID: D14182PP

Leadership Group: Land			
Department: Information Technology		Division: Application Services	
Project Sponsor: Tammi Shepherd	Date Requested: 4/21/2022	PM Customer No. 182	
Request Type:	<u><i>New Development</i></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 request portal system so that Oakland County CAMS participants can engage local residents and employees, improve and expand data collection and maximize workflow efficiencies through an integrated solution.

Business Objective

Engage local communities, residents and Oakland County employees by implementing a mobile-friendly 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
- Implement into Production

Oakland County Department of Information Technology Project Scope and Approach

Project Name: CAMS Public Request Portal 2023-2024

Project ID: D14182PP

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 – N/A

Benefits

See Return on Investment (ROI) Analysis Document

**Oakland County
Department of Information Technology
Project Scope and Approach**

Project Name: CAMS Public Request Portal 2023-2024

Project ID: D14182PP

Impact

Number of Users CAMS Users and Public

Divisions WRC, RCOC and Facilities Management

Leadership Groups Land

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’ Web Hooks functionality.
- Cityworks Web Hook functionality requires CAMS to be at v15.x or higher

**Oakland County
Department of Information Technology
Project Scope and Approach**

Project Name: CAMS Public Request Portal 2023-2024

Project ID: D14182PP

Funding

- Funded – CAMS Program

Other

-

Priority

Constraints

-
-

Exclusions

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

**Oakland County
Department of Information Technology
Project Scope and Approach**

Project Name: CAMS Public Request Portal 2023-2024

Project ID: D14182PP

PROJECT PHASE AUTHORIZATION

Phase(s):	
Total Estimated Application Services	Hours: 790
Total Estimated Technical Systems	Hours: 12
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: 802 Cost: \$132,330

Oakland County Department of Information Technology Project Scope and Approach

Project Name: CAMS Public Request Portal 2023-2024

Project ID: D14182PP

PROJECT COMPLETION AUTHORIZATION

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

CAMS Public Request Portal 2023-2024 - Size Estimate (+/- 10% to 50%)

1	Type	ID	Task Name	Estimated
2				Hours
3		000000	PROJECT MANAGEMENT	215
4	Phase	200000	DEFINE BUSINESS REQUIREMENTS	53
5	Phase	300000	DESIGN SYSTEM ARCHITECTURE	24
6	Phase	500000	DEVELOP APPLICATION	346
7	Phase	600000	IMPLEMENTATION PHASE	118
8	Phase	800000	POST IMPLEMENTATION SUPPORT	46
9				802

Oakland County -- CAMS Public Request Portal 2023-2024

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:	148,830	18,150	19,965	21,962	24,158	26,573	259,638
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	148,830	18,150	19,965	21,962	24,158	26,573	259,638
Annual Return on Investment	(143,630)	(12,950)	(14,765)	(16,762)	(18,958)	(21,373)	(228,438)
Annual Costs/Savings Ratio	2862.12%	349.04%	383.94%	422.34%	464.57%	511.03%	
Project Cumulative Statistics:							
Cumulative Total Savings	5,200	10,400	15,600	20,800	26,000	31,200	31,200
Cumulative Total Costs	148,830	166,980	186,945	208,907	233,064	259,638	259,638
Cumulative Return on Investment	(143,630)	(156,580)	(171,345)	(188,107)	(207,064)	(228,438)	(228,438)
Cumulative Cost/Savings Ratio	2862.12%	1605.58%	1198.37%	1004.36%	896.40%	832.17%	832.17%
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 -- CAMS Public Request Portal 2023-2024

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 and County employees	Intangible Benefit	x	x	x	x	x	x	0.00	0.00	0.00	0.00	0.00	0.00	0
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	0
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	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	x	x	x	x	x	x	5,200.00	5,200.00	5,200.00	5,200.00	5,200.00	5,200.00	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													

Oakland County -- CAMS Public Request Portal 2023-2024

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 and County employees	0	0	0	0	0	0	0
Expands data collection and analysis of assets	0	0	0	0	0	0	0
Centralizes and streamlines work management	0	0	0	0	0	0	0
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

Oakland County -- CAMS Public Request Portal 2023-2024

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		HR	802	165	132,330		x							
IT Hours - System Maintenance	Development Svcs		HR	25	165	4,125	1.100	x	x	x	x	x	x		
IT Hours - Customer Support	Development Svcs		HR	50	165	8,250	1.100	x	x	x	x	x	x		
IT Hours - Planned Maintenance	Development Svcs		HR	25	165	4,125	1.100	x	x	x	x	x	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				639	0									
PC System - Maintenance	Hardware				3,352	0									
Laptop - Acquisition	Hardware				922	0									
Laptop - Maintenance	Hardware				3,352	0									
Tablet Notebook - Acquisition	Hardware				1,069	0									
Tablet Notebook - Maintenance	Hardware				3,352	0									
File Space (100GB)	Hardware		ANN		23	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									
Oracle Enterprise Software Purchase - 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								
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									

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 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				3,769	0								
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				754	0								
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				14,170	0								
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				2,835	0								
SSL Certificate	Infrastructure				910	0								

Oakland County -- CAMS Public Request Portal 2023-2024
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
Internet Access	Infrastructure				190	0							
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure		ANN		500	0							
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure		ANN		446	0							
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$601 On Premise Physical Server = \$2,735	Infrastructure		ANN			0							
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$3,057	Infrastructure		ANN			0							
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$8,715	Infrastructure		ANN			0							
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$3,167 On Premise Physical Server = \$10,758	Infrastructure		ANN			0							
Extra Large - 40 Core 192GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$24,137	Infrastructure		ANN			0							

Oakland County -- CAMS Public Request Portal 2023-2024

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	132,330.00					
IT Hours - System Maintenance	Development Svcs	4,125.00	4,537.50	4,991.25	5,490.38	6,039.41	6,643.35
IT Hours - Customer Support	Development Svcs	8,250.00	9,075.00	9,982.50	10,980.75	12,078.83	13,286.71
IT Hours - Planned Maintenance	Development Svcs	4,125.00	4,537.50	4,991.25	5,490.38	6,039.41	6,643.35
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						
Laptop - Acquisition	Hardware						
Laptop - Maintenance	Hardware						
Tablet Notebook - Acquisition	Hardware						
Tablet Notebook - Maintenance	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						
Oracle Enterprise Software Purchase - Per Processor (4 Cores) - Requires Annual Support Below	Infrastructure						
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						

Oakland County -- CAMS Public Request Portal 2023-2024
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
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						
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						

Oakland County -- CAMS Public Request Portal 2023-2024
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Internet Access	Infrastructure						
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure						
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure						
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$601 On Premise Physical Server = \$2,735	Infrastructure						
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$3,057	Infrastructure						
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$8,715	Infrastructure						
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$3,167 On Premise Physical Server = \$10,758	Infrastructure						
Extra Large - 40 Core 192GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$24,137	Infrastructure						

Oakland County -- CAMS Public Request Portal 2023-2024

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	132,330						132,330
IT Hours - System Maintenance	4,125	4,538	4,991	5,490	6,039	6,643	31,827
IT Hours - Customer Support	8,250	9,075	9,983	10,981	12,079	13,287	63,654
IT Hours - Planned Maintenance	4,125	4,538	4,991	5,490	6,039	6,643	31,827
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
<i>Development Services Subtotal:</i>	148,830	18,150	19,965	21,962	24,158	26,573	259,638
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:	148,830	18,150	19,965	21,962	24,158	26,573	259,638

