Project Name: Animal Control OPLS Replacement

Project ID: D99178PL

Leadership Group: Courts/Justice Administration										
Department: Public Services			Division: Animal Control							
Project Sponsor: Joanie	Date Requeste	d: 3/7/2018	PM Custom	i er No . 178						
Request Type:	New Develo	pment	Enhancement	Cust	tomer Support					
	Planned Sys	stem Maintenand	e or Upgrade							
IT Team Name: Assessir	ng and Taxatior	1	IT Team No: 9							
Project Manager/Leader	: Dennis Faust	ich								
Account Number: 95628	Account Description:	Animal Cont	rol	Customer Name:	Animal Control					
Grant Funded? Yes	No	Ма	ndate?	Yes	No					
		Ма	ndate Source:							

Project Goal

To research and replace the Online Pet Licensing System (OPLS) and integrate with PAWS application so that OPLS meets the County's current technical and security standards and provides better user experience.

Business Objective

To upgrade the aging OPLS system that is currently being used by the citizens of Oakland County to purchase their dog's license to make their experience more efficient and user friendly, as well as, minimize user and technical support.

Major Deliverables

- Detailed Project Plan
- Application and/or System Requirements
- Develop Application
- User Acceptance Test Plan
- Implementation Plan
- Training/User Manual(s)
- Update Disaster Recovery Toolkit
- Update Service Center Knowledge Documents

Approach

- Develop Detailed Project Plan
- Document Business and /or System Requirements

Project Name: Animal Control OPLS Replacement

- 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, Disaster Recovery Toolkit, Service Center Knowledge Documents
- Train users on new system
- Release new system into production

Research & Analysis

Gartner Research Recommendation – Nothing Found

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users	30,000 citizens of Oakland County
Divisions	Animal Control
Leadership Groups	Courts/Justice Administration
<u>Risk</u>	
Business Environment	Medium – Project will require some changes to existing business processes.
Technical Environment	Medium – Project will require some changes to existing business processes.

Assumptions

Project Nam	e: Animal Control C	PLS Replacement	Project ID: D99178PL
Staffing	project plan.	es will be available for the hours indication to the second staffing will be available as follow	
Role:		Name	<u>Hours per Day</u>
Project S	Sponsor:	Joanie Toole, Animal Control	As Needed
Project I	Vanager	Scott Kaiser, OCIT	As Needed

Facilities

• None

Technical

• The application will need to be integrated with Oakland County's Enterprise Payment System, as well as, Oakland County's Animal Control Pet Licensing Database.

Funding

• TBD

Other

• None

Priority

• TBD

Constraints

• N/A

Exclusions

• N/A

Project Name: Animal Control OPLS Replacement

Project ID: D99178PL

PROJECT PHASE AUTHORIZATION

Phase(s): All									
Total Estimated Application Services									
Total Estimated Technical Systems	Hours: 21								
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: 734	Cost: \$121,110

Project Name: Animal Control OPLS Replacement Project

Project ID: D99178PL

PROJECT COMPLETION AUTHORIZATION

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

Animal Control OPLS Replacement - Size Estimate (+/- 10% to 50%)

1	Туре	ID	Task Name	Estimated
2				Hours
3	3	000000	PROJECT MANAGEMENT	187
4	Phase	200000-0	DEFINE BUSINESS REQUIREMENTS	41
5	Phase	300000-0	DESIGN SYSTEM ARCHITECTURE	15
6	Phase	500000-0	DEVELOP APPLICATION	422
7	Phase	600000-0	IMPLEMENTATION PHASE	39
8	Phase	080000	POST IMPLEMENTATION SUPPORT	30
9		1		734

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:	29,400	30,282	31,190	32,126	33,090	34,083	190,171
Costs:							
Development Services Subtotal:	121,110	0	0	0	0	0	121,110
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	29,400	30,282	31,190	32,126	33,090	34,083	190,171
Annual Total Costs	121,110	0	0	0	0	0	121,110
Annual Return on Investment	(91,710)	30,282	31,190	32,126	33,090	34,083	69,061
Annual Costs/Savings Ratio	411.94%	0.00%	0.00%	0.00%	0.00%	0.00%	,
Project Cumulative Statistics:							
Cumulative Total Savings	29,400	59,682	90,872	122,999	156,089	190,171	190,171
Cumulative Total Costs	121,110	121,110	121,110	121,110	121,110	121,110	121,110
Cumulative Return on Investment	(91,710)	(61,428)	(30,238)	1,889	34,979	69,061	69,061
Cumulative Cost/Savings Ratio	411.94%	202.93%	133.27%	98.46%	77.59%	63.68%	63.68%
Year Positive Payback Achieved				Year 4			Year 4
State or Federal Mandate?							
Signatures:							
Benefits Reviewed By Project Sponsor				Date:			
Costs (including IT Resources) Reviewed By Information Technology Project Manager				Date:			

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
Reduce average customer support per year due to older application	Cost Avoidance			100	\$ 147.00	\$ 14,700.00	1.030
Remediation of security incidents per year	Cost Avoidance			50	\$ 147.00	\$ 7,350.00	1.030
Reduce average unplanned maintenance per year	Cost Avoidance			50	\$ 147.00	\$ 7,350.00	1.030
Improved user experience - a new system will reduce the number of incidents reported related to an aging system such as cross browser functionality and allow Customer Support to focus on high priority incidents.	Intangible Benefit					0	
Smoother Running System: a new system will reduce the number of incidents reported related to an aging system such as dropped tags/orders.	Intangible Benefit					0	
Leveraging the VersalCode Template will provide the public a more responsive application, as well as, make the application mobile friendly.	Intangible Benefit					0	
						0 0 0	
						0	
						0	

Return on Investment Analysis

Savings Detail

		A	ffect	ts P	roje	ct R	01?	Potential Savings Extensions					
Benefit/Savings Description	Project Savings Category	Y1	Y2	Y3	Y4	Y	5 Y6	Y1	Y2	Y3	Y4	Y5	Y6
Reduce average customer support per year due to older application	Cost Avoidance	x	x	x	x	x	x	14,700.00	15,141.00	15,595.23	16,063.09	16,544.98	17,041
Remediation of security incidents per year	Cost Avoidance	x	x	x	x	x	x	7,350.00	7,570.50	7,797.62	8,031.54	8,272.49	8,521
Reduce average unplanned maintenance per year	Cost Avoidance	x	x	x	x	x	x	7,350.00	7,570.50	7,797.62	8,031.54	8,272.49	8,521
Improved user experience - a new system will reduce the number of incidents reported related to an aging system such as cross browser functionality and allow Customer Support to focus on high priority incidents.	Intangible Benefit												
Smoother Running System: a new system will reduce the number of incidents reported related to an aging system such as dropped tags/orders.	Intangible Benefit												
Leveraging the VersalCode Template will provide the public a more responsive application, as well as, make the application mobile friendly.	Intangible Benefit												
			-										

Oakland County -- Animal Control OPLS Replacement Return on Investment Analysis

As Of: 3/7/2018

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:							
Reduce average customer support per year							
due to older application	14,700	15,141	15,595	16,063	16,545	17,041	95,086
	,	,	,	,		,	,
Remediation of security incidents per year	7,350	7,571	7,798	8,032	8,272	8,521	47,543
Reduce average unplanned maintenance	,	,	,	,		,	,
per year	7,350	7,571	7,798	8,032	8,272	8,521	47,543
	7,000	7,071	1,100	0,002	0,212	0,021	77,040
Cost Avoidance Subtotal:	29,400	30,282	31,190	32,126	33,090	34,083	190,171
Intangible Benefit:							
Improved user experience - a new system							
will reduce the number of incidents reported							
related to an aging system such as cross							
browser functionality and allow Customer							
Support to focus on high priority incidents.							
Smoother Running System: a new system							
will reduce the number of incidents reported							
related to an aging system such as dropped							
tags/orders.							
Leveraging the VersalCode Template will							
provide the public a more responsive							
application, as well as, make the application							
mobile friendly.							
Savings Total:	29,400	30,282	31,190	32,126	33,090	34,083	190,171

Return on Investment Analysis

								Af	fects	s Pro	ject	RO	I?
Cost Description	Project Cost	Budget Category/Funding	Unit	l lucito	Rate per	Total Cost	Annual	VA	Va	Va	~	VE	VC
Cost Description	Category	Source	Desc	Units	Unit	Total Cost			12	Y3	14	10	10
IT Hours - New Development	Development Svcs		HR	734	165	121,110	1.000	х				 	
IT Hours - System Maintenance	Development Svcs				165	0					\rightarrow	\rightarrow	
IT Hours - Customer Support	Development Svcs				165	0							
IT Hours - Planned Maintenance	Development Svcs				165	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					,						1	1	
2 and Beyond	Infrastructure				3,432	0					ĺ	ĺ	

Return on Investment Analysis

								Af	fects	s Proj	ect RC)I?
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual					
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3 Y	4 Y5	Y6
SQL Server Enterprise - Per Processor									ļ		1	
(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						1
SQL Server Enterprise - Per Processor												
(4 cores) - Purchased Sept 2018-Aug												1
2019 - Includes Maintenance thru Aug									į			
2019	Infrastructure				16,985	0						
SQL Server Enterprise - Maintenance,												
Per Processor (4 cores) - Sept 2019												1
and Beyond	Infrastructure				4,218	0			į			1
SQL Server Standard - Per Processor												
(4 cores) - Purchased Sept 2016-Aug									ļ		1	
2017 - Includes Maintenance thru Aug									į			
2019	Infrastructure				6,398	0					1	
SQL Server Standard - Per Processor												
(4 cores) - Purchased Sept 2017-Aug												
2018 - Includes Maintenance thru Aug												1
2019	Infrastructure				5,414	0						
SQL Server Standard - Per Processor												
(4 cores) - Purchased Sept 2018-Aug												1
2019 - Includes Maintenance thru Aug											1	
2019	Infrastructure				4,429	0						
SQL Server - Standard Maintenance,												
Per Processor (4 cores) - Sept 2019												
and Beyond	Infrastructure				1,100	0			ļ			
Websphere Basic Per Processor												
Single/Dual Core - Includes Year 1												
Maintenance	Infrastructure				3,506	0						

Return on Investment Analysis

								Af	fect	s Prc	ject	ROI?
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
Websphere Basic Per Processor												
Single/Dual Core - Year 2 and Beyond	Infrastructure				701	0						
Websphere ND Per Processor					701	0	-			\vdash	\rightarrow	
Single/Dual Core - Includes Year 1												
Maintenance	Infrastructure				13,180	0						
					10,100							
Websphere ND Per Processor												
Single/Dual Core - Year 2 and Beyond	Infrastructure				2,635	0		1				
SSL Certificate	Infrastructure				845	0					-+	
Internet Access	Infrastructure				180	0					-+	
Imperva Web Application Firewall					100	0						
(External Web Applications Only)	Infrastructure		ANN		500	0						
App Code Directories on Consolidated			,		000	0					\rightarrow	
IIS Server (Virtual)	Infrastructure		ANN		415	0		1	i			
Database (5 GB) on Consolidated SQL											\rightarrow	
Instance Server	Infrastructure		ANN		930	0		1				
Database Instance (125 GB DB) on						•					\rightarrow	
Consolidated SQL Server	Infrastructure		ANN		2,395	0		1				
Database SQL Maint Server	Infrastructure		ANN		834	0					\rightarrow	
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								1			-	
Exisitng Instance	Infrastructure				366	0		1			l	
Extra Small - 2 Core 8GB RAM, 500GB												
Drive, 10 GB NIC - Cloud/Virtual = \$601								1				
On Premise Physical Server = N/A	Infrastructure		ANN			0						

Return on Investment Analysis

								Af	Affects Project ROI?				
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
Small - 4 Core 16GB RAM, 500GB													
Drive, 10 GB NIC - Cloud/Virtual = \$951													
On Premise Physical Server = \$9,288	Infrastructure		ANN			0					ļ	l	
Medium - 8 Core 32GB RAM, 500GB													
Drive, 10 GB NIC - Cloud/Virtual =													
\$1,702 On Premise Physical Server =													
+ - J -	Infrastructure		ANN			0							
Large - 16 Core 64GB RAM, 500GB											ļ		
Drive, 10 GB NIC - Cloud/Virtual =													
\$3,167 On Premise Physical Server =													
\$10,446	Infrastructure		ANN			0							
Extra Large - 40 Core 160GB RAM,												ļ	
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		 i			į	ł	
												\rightarrow	
												i	

Return on Investment Analysis

	Potential Cost Extensions								
Cost Description	Project Cost Category	Y1	Y2	Y3	Y4	Y5	Y6		
IT Hours - New Development	Development Svcs	121,110		<u>.</u>	<u>.</u> 	• 			
IT Hours - System Maintenance	Development Svcs	,		1	1				
IT Hours - Customer Support	Development Svcs								
IT Hours - Planned Maintenance	Development Svcs			1	1				
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				1				
Tablet Notebook - Maintenance	Hardware								
Laserprinter - Acquisition	Hardware				1				
Laserprinter - Maintenance	Hardware								
Image Workstations - Acquisition	Hardware								
Image Workstations - Maintenance	Hardware					1			
PC Maintenance User Owned	Hardware								
Printer Maintenance User Owned	Hardware				1				
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								

Return on Investment Analysis

	Potential Cost Extensions									
	Project Cost									
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6			
SQL Server Enterprise - Per Processor		-								
(4 cores) - Purchased Sept 2016-Aug										
2017 - Includes Maintenance thru Aug										
2019	Infrastructure		Į							
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						Î I I				
(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									
SQL Server - Standard Maintenance,										
Per Processor (4 cores) - Sept 2019										
and Beyond	Infrastructure									
Websphere Basic Per Processor		I								
Single/Dual Core - Includes Year 1										
Maintenance	Infrastructure		1							

Return on Investment Analysis

	Potential Cost Extensions									
	Project Cost	N/4	NO.	Vo	N/A	VE	Ve			
Cost Description	Category	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		<u> </u>							
Websphere ND Per Processor	1 f									
Single/Dual Core - Year 2 and Beyond	Infrastructure									
SSL Certificate	Infrastructure									
Internet Access	Infrastructure		ļ							
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			1			•				
Exisitng Instance	Infrastructure									
Extra Small - 2 Core 8GB RAM, 500GB										
Drive, 10 GB NIC - Cloud/Virtual = \$601										
On Premise Physical Server = N/A	Infrastructure									

Return on Investment Analysis

		Potential Cost Extensions									
Cost Description	Project Cost Category	Y1	Y2	Y3	Y4	Y5	Y6				
Small - 4 Core 16GB RAM, 500GB											
Drive, 10 GB NIC - Cloud/Virtual = \$951			1								
On Premise Physical Server = \$9,288	Infrastructure										
Medium - 8 Core 32GB RAM, 500GB			1								
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 =			1								
\$10,446	Infrastructure		1								
Extra Large - 40 Core 160GB RAM,											
500GB Drive, 10 GB NIC - Cloud/Virtual											
= \$7,564 On Premise Physical Server =											
\$12,906	Infrastructure		1								
Project Staff Training	Training										
User Training	Training										

As Of: 3/7/2018

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	121,110						121,110
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:	121,110						121,110
Hardware:							
Hardware Subtotal:							
Software:							
Software Subtotal.							
Infrastructure:							
Infrastructure Subtotal							
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	121,110						121,110

Return on Investment Analysis

Assumptions

Date	Assumption Description
	No new hardware required, will be re-using existing Versal Template servers
06-Jun-18	Will be re-using existing PAWS SOL db on consolidated
06-Jun-18	Will be re-using existing PAWS SQL db on consolidated Assumes continued use of Shopping Cart for Checkout