Project Name: WRC Website Standardization Project ID: DE9611WR

Leadership Group: Lan	d										
Department: Water Res	sources Comn	nissioner's	Office		Divis	ion: Adminis	strative				
Project Sponsor: Tim Prince Date Requested: 3/7/18 PM Customer No. 611											
Request Type: New Development Enhancement Customer Support											
	Planned Sys	stem Mainte	nance or Up	grade							
IT Team Name: eGover	nment		IT Tea	ım No:	Ε						
Project Manager/Leade	r: Sherry Yagi	iela									
Account 37939 Number:	Account Description:		and sewer ge	n adm	in	Customer Name:	Water Resources Commissioner				
Grant Funded? Yes	<u>No</u>		Mandate? Mandate S	ource	:	Yes	<u>No</u>				

Project Goal

To leverage Oakland County web technologies so that Water Resources Commissioner's Office website presence becomes an attractive and useful website within Oakgov.com.

Business Objective

To standardize all web applications and convert Water Resources Commissioner's Office (oakgov.com/water) to new v2 fire template so that development and maintenance of the site is reduced.

Major Deliverables

- Detailed Project Plan
- Standardize oakgov.com/water template
- Simplify the navigation
- Evaluate content
- Convert content to new web applications

Approach

- Develop detailed project plan
- Convert g2gmarketplace.com to v2 fire template
- Evaluate managed and structured navigation
- Transition site to appropriate navigation type
- Eliminate outdated content
- Convert all remaining web applications/web parts

Project Name: WRC Website Standardization Project ID: DE9611WR

Research & Analysis

Gartner Research Recommendation; Research conducted, findings below.

Four Actions Government CIOs Can Take to Improve Website Experiences for Citizens

Government websites aspire to serve citizens, but instead present an agency-centric view that frustrates citizens. Citizens are presented with overwhelming amounts of information and poor navigation that is not optimized for mobile or desktop access, location, or past interactions with the agency, and they often abandon self-service website solutions. Websites are just one aspect of citizens' overall experiences with government agencies, but there is often little or no coordination among these multiple channels to provide a consistent and concise citizen experience.

The recommendation is to implement digital design principles for website interactions that will inspire, motivate and empower continuous improvement of the citizen experience by leveraging social science and customer journey-mapping experts. In addition, create a personal and engaging online experience by integrating customer experience analytics and a personalization engine into website capabilities.

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users Public

Divisions Water Resource Commissioner

Leadership Groups Land

<u>Risk</u>

Business Environment Medium: Project will require some changes to existing business

processes

Technical Environment Low: Previously implemented technologies with new aspects

and/or new requirements.

Project Name: WRC Website Standardization Project ID: DE9611WR

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

Sponsor: Tim Prince As Needed IT Liaison: Nancy Basch As Needed Content Editor WRC Business Systems Editors As Needed

Facilities

None

Technical

Website will be created using SharePoint 2013

Funding

• Information Technology

Other

•

Priority

TBD

Constraints

None at this time

Exclusions

Hours based on migration not a site redesign

Project Name: WRC Website Standardization Project ID: DE9611WR

PROJECT PHASE AUTHORIZATION

Phase(s): All		
Total Estimated Application Services	Hours: 389	
Total Estimated Technical Systems	Hours:	
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

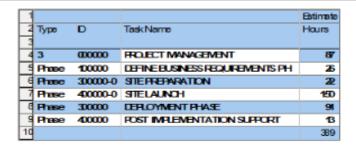
Authorized Development (see above)	Hours : 389	
Preliminary Estimated Development for Future Phases	Hours:	
Grand Total Estimated Development	Hours: 389	Cost : \$64,185

Project Name: WRC Website Standardization Project ID: DE9611WR

PROJECT COMPLETION AUTHORIZATION

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

WRC Website Redesign - Size Estimates - Phase Level



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:	0	0	0	0	0	0	0
Costs:							
Development Services Subtotal:	64,185	0	0	0	0	0	64,185
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	0	0	0	0	0	0	0
Annual Total Costs	64,185	0	0	0	0	0	64,185
Annual Return on Investment	(64,185)						(64,185)
Annual Costs/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	(5.,1.55)
Project Cumulative Statistics:							
Cumulative Total Savings	0	0	0	0	0	0	0
Cumulative Total Costs	64,185	64,185	64,185	64,185	64,185	64,185	64,185
Cumulative Return on Investment	(64,185)	(64,185)	(64,185)	(64,185)	(64,185)	(64,185)	(64,185)
Cumulative Cost/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
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:			

Return on Investment Analysis

	Project Savings		Unit		Rate per		Annual
Benefit/Savings Description	Category	Budget Category/Funding Source	Desc	Units	Unit	Total Savings	Multiplier
Improve brand awareness through a							
newly designed website	Intangible Benefit					0	
Leverage existing content from current							
website	Intangible Benefit					0	
Improve usability for customers	Intangible Benefit					0	
Improve customer satisfaction	Intangible Benefit					0	
Keep up with current trends such as							
social media and other popular web						_	
integrations	Intangible Benefit					0	
Leverage the already built technologies							
to lower the cost of this project and							
future web initiatives of WRC.						_	
	Intangible Benefit					0	
Link all public facing applications and							
portals creating multiple efficiencies						_	
and a better user experience	Intangible Benefit					0	
Information presented in a simplistic							
and friendly user interface for visitors to							
easily complete the call to action or							
user task.	Intangible Benefit					0	
Methodology of separating the data and presentation will minimize the effort to							
Į.							
update the site and position WRC for							
the future of open data and/or big data.	Intensible Penefit					0	
	Intangible Benefit					U	
Mobilization of all sites to accommodate							
the significant amount of users coming							
to the site via a mobile device.	Intangible Benefit					0	
to the site via a mobile device.	intangible beliefit					0	
Keep communities informed of project							
impact and status (i.e. when roads are							
expected to open up, DEQ well testing)	Intangible Benefit					0	
Keep citizens informed of critical	mangible Benefit						
events, such as Boil Water Notices	Intangible Benefit					0	
Inform citizens about bill payment	g.z.c Donone						
options and assistance	Intangible Benefit					0	
Provide easier navigation to access	J						
new portals for Soil Erosion permitting							
and for Water, Sewer & Drain							
Extension permits.	Intangible Benefit					0	
Showcase major project initiatives with	<u> </u>						
maps, status	Intangible Benefit					0	

Return on Investment Analysis

Benefit/Savings Description	Project Savings Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
Highlight different jobs available within							
WRC	Intangible Benefit					0	

Return on Investment Analysis

		Af	ffect	s Pr	oject ROI? Potential Savings Extensions							ons	·
Benefit/Savings Description	Project Savings Category	Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
Improve brand awareness through a									<u> </u> 	<u> </u> 	<u> </u> 		
newly designed website	Intangible Benefit		ļ	<u> </u>									<u> </u>
Leverage existing content from current	latan allala Dan efit			ĺ					ļ	ļ	ļ		İ
	Intangible Benefit Intangible Benefit	+	-	 					<u> </u>	<u> </u>	<u> </u>	ļ	<u> </u>
Improve usability for customers Improve customer satisfaction	Intangible Benefit	+		 					<u> </u>	<u> </u>	<u> </u>	<u> </u>	
Keep up with current trends such as	intangible benefit		<u> </u>	ļ —					<u> </u>	<u> </u>	<u> </u>	<u> </u>	
social media and other popular web	Intangible Benefit												
Leverage the already built technologies	intangible benefit			<u> </u>					<u> </u>	<u> </u>	<u> </u>	<u> </u>	
to lower the cost of this project and future web initiatives of WRC.	Intangible Benefit												
Link all public facing applications and portals creating multiple efficiencies and a better user experience	Intangible Benefit												
Information presented in a simplistic	intaligible beliefit		-	ļ —	-				<u> </u>	<u> </u>	<u> </u>	 	
and friendly user interface for visitors to easily complete the call to action or	Intangible Benefit												
Methodology of separating the data and presentation will minimize the effort to update the site and position WRC for the future of open data and/or big data.	Intangible Benefit												
Mobilization of all sites to accommodate	<u> </u>		 	 									
the significant amount of users coming	Intangible Benefit												
Keep communities informed of project impact and status (i.e. when roads are expected to open up, DEQ well testing)	Intangible Benefit												
Keep citizens informed of critical events, such as Boil Water Notices	Intangible Benefit								 	 	 		
Inform citizens about bill payment options and assistance	Intangible Benefit												
Provide easier navigation to access new portals for Soil Erosion permitting and for Water, Sewer & Drain													
Showcase major project initiatives with	Intangible Benefit Intangible Benefit								<u> </u> 	<u> </u> 	<u> </u> 	<u> </u> 	

Return on Investment Analysis

		Α	Affects Project ROI? Potential Savings Extensions										
	Project Savings				!								
Benefit/Savings Description	Category	Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
Highlight different jobs available within			1	!	!	!	!						
WRC	Intangible Benefit		į										
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			<u> </u>	<u> </u>	!	ļ	ļ						
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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:							
Tangible Benefits Subtotal:							
Tangible Denems Subtotal.							
Cost Avoidance:							
Jost Avoidance.							
							
Cost Avoidance Subtotal:							
ntangible Benefit:							
Improve brand awareness through a newly							
designed website							
Leverage existing content from current							
website							
Improve usability for customers							
Improve customer satisfaction							
Keep up with current trends such as social							
media and other popular web integrations							
д-р-г							
Leverage the already built technologies to							
lower the cost of this project and future web							
initiatives of WRC.							
Link all public facing applications and portals							
creating multiple efficiencies and a better							
user experience							
Information presented in a simplistic and							1
friendly user interface for visitors to easily							
complete the call to action or user task.							
Methodology of separating the data and						1	1
presentation will minimize the effort to							
update the site and position WRC for the							
future of open data and/or big data.						1	1
Mobilization of all sites to accommodate the							
significant amount of users coming to the							
site via a mobile device.						1	<u> </u>

Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Keep communities informed of project							
impact and status (i.e. when roads are							
expected to open up, DEQ well testing)							
Keep citizens informed of critical events,							
such as Boil Water Notices							
Inform citizens about bill payment options							
and assistance							
Provide easier navigation to access new							
portals for Soil Erosion permitting and for							
Water, Sewer & Drain Extension permits.							
Showcase major project initiatives with							
maps, status							
Highlight different jobs available within WRC							
		·					
Savings Total:							

Return on Investment Analysis

								Af	fect	s Pr	ojec	t ROI?)			Potential Cos	st Extensions
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual	l									
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3	Y4	Y5 Y		Y1	Y2	Y3	Y4
IT Hours - New Development	Development Svcs			389	165	64,185		Х					64	4,185.00			ļ
IT Hours - System Maintenance	Development Svcs				165	0								j		1	
IT Hours - Customer Support	Development Svcs				165	0								į			<u> </u>
IT Hours - Planned Maintenance	Development Svcs				165	0					•					1	!
User Hours - New Development	Development Svcs					0								į		i]
User Hours - PTNE/OT	Development Svcs					0											
Contractor Professional Services	Development Svcs					0					i			1		Ì	i
PC System - Acquisition	Hardware				814	0					İ						•
PC System - Maintenance	Hardware				2,304	0					ĺ						1
Notebook - Acquisition	Hardware				1,223	0					İ						
Notebook - Maintenance	Hardware				2,372	0								ļ			1
Tablet Notebook - Acquisition	Hardware				2,012	0								İ		İ	1
Tablet Notebook - Maintenance	Hardware				,	0											†
Laserprinter - Acquisition	Hardware				1,432	0					l					İ	<u> </u>
Laserprinter - Maintenance	Hardware				1,104	0											!
Image Workstations - Acquisition	Hardware				, -	0					ļ						1
Image Workstations - Maintenance	Hardware				3,496	0					İ					İ	†
PC Maintenance User Owned	Hardware				2,304	0					!					1	†
Printer Maintenance User Owned	Hardware				1,072	0					İ			i		İ	†
File Space (100GB)	Hardware		ANN		173	0										-	
Internet Bandwidth per MB	Hardware		ANN		750	0					1					1	†
Package Software - Acquisition	Software					0					İ						†
Package Software - Maintenance	Software					0											†
Business Objects Access	Software					0					1			<u> </u>		İ	1
Term Emulation SFTW-Acquisition	Software					0					ļ —					-	<u> </u>
Term Emulation SFTW-Maintenance	Software					0					<u> </u>					1	<u> </u>
Server - Acquisition/Upgrade	Infrastructure				8,000	0					i !			i		İ	†
Server - Maintenance	Infrastructure				360	0										1	
Server Sftwre - Acquisition/Upgrade	Infrastructure				335	0					<u> </u>					<u> </u>	
Server Sftwre - Maintenance	Infrastructure				000	0					İ			i		İ	
Server Rack Mount	Infrastructure				400	0				-						1	<u> </u>
Oracle Enterprise Per Processor -	illinaoti aotaro				400	0					-			- I		1	
Includes Year 1 Maintenance	Infrastructure				21,372	0					İ						!
Oracle Enterprise Per Processor - Year	imasiractare				21,072	<u> </u>										1	
2 and Beyond	Infrastructure				3,432	0					İ			į		į	ļ '
SQL Server Enterprise - Per Processor	imasiractare				0,402	<u> </u>					-						<u> </u>
(4 cores) - Purchased Sept 2016-Aug											İ			į			į
2017 - Includes Maintenance thru Aug											i						
2017 - Includes Maintenance thru Aug 2019	Infrastructure				24,533	0								ļ			!
SQL Server Enterprise - Per Processor	mmasuuciule		1		24,533	U	 			-	 					+	
(4 cores) - Purchased Sept 2017-Aug								1		l				İ			
2018 - Includes Maintenance thru Aug									İ	İ	İ			į			ļ '
2019 - Includes Maintenance thru Aug 2019	Infractructure				20,759	0					i						
2018	Infrastructure			l	20,759	U					<u> </u>	<u> </u>		i		1	1

Return on Investment Analysis

								Af	Affects Project ROI?					Potential Co	al Cost Extensions		
Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Y1	Y2	Y3	Y 4	Y5	Y6	Y1	Y2	Y3	Y4
SQL Server Enterprise - Per Processor										!	ļ	<u> </u>				ļ	
(4 cores) - Purchased Sept 2018-Aug										l	•				į	į	
2019 - Includes Maintenance thru Aug								li		ĺ	İ	İ				İ	
2019	Infrastructure				16,985	0		i				İ					
SQL Server Enterprise - Maintenance,										ĺ	•	Ì			į	İ	
Per Processor (4 cores) - Sept 2019								l		1	İ	İ					
and Beyond	Infrastructure				4,218	0					-	<u> </u>				ļ	
SQL Server Standard - Per Processor										ļ	İ	į			ļ		
(4 cores) - Purchased Sept 2016-Aug										į	Ì	ļ					
2017 - Includes Maintenance thru Aug										İ	•	į			į	İ	
2019	Infrastructure				6,398	0		l		1	İ	İ					
SQL Server Standard - Per Processor												•				1	
(4 cores) - Purchased Sept 2017-Aug										ļ	į	į			İ	İ	
2018 - Includes Maintenance thru Aug										į	į	į					
2019	Infrastructure				5,414	0				1	ļ	1			į	į	
SQL Server Standard - Per Processor											İ	İ					
(4 cores) - Purchased Sept 2018-Aug										1	!	!			1		
2019 - Includes Maintenance thru Aug										ļ	•	İ					
2019	Infrastructure				4,429	0				ļ	•	1					
SQL Server - Standard Maintenance,					,						•	İ			İ	İ	
Per Processor (4 cores) - Sept 2019								li			İ	į					
and Beyond	Infrastructure				1,100	0				!	}	ļ			1		
Websphere Basic Per Processor					,			li		İ	i	i			i	İ	
Single/Dual Core - Includes Year 1								l		1	İ	İ					
Maintenance	Infrastructure				3,506	0		li		į	ļ	į					
								l		ļ	1	İ			ļ	ļ	
Websphere Basic Per Processor										!	!	!			ļ	1	
Single/Dual Core - Year 2 and Beyond	Infrastructure				701	0				ļ	•	İ					
Websphere ND Per Processor												İ					
Single/Dual Core - Includes Year 1										ĺ	•	į			į		
Maintenance	Infrastructure				13,180	0				į	<u> </u>	j					
								li		l	į	İ			ļ		
Websphere ND Per Processor								li			İ	į			İ		
Single/Dual Core - Year 2 and Beyond					2,635	0				ļ	<u> </u>	-					<u> </u>
SSL Certificate	Infrastructure				845	0		į		į	<u> </u>	į			_i	j	<u>i</u>
Internet Access	Infrastructure				180	0					<u> </u>	<u> </u>			ļ	<u> </u>	<u> </u>
Imperva Web Application Firewall							1			1	į	1				ļ	į l
(External Web Applications Only)	Infrastructure		ANN		500	0				ļ .	<u> </u>	<u> </u>				1	<u> </u>
App Code Directories on Consolidated										i	ŀ	İ				İ	į !
IIS Server (Virtual)	Infrastructure		ANN		415	0		Li		<u> </u>	!	<u> </u>					<u> </u>
Database (5 GB) on Consolidated SQL										1		1				İ	
Instance Server	Infrastructure		ANN		930	0					!	<u> </u>			ļ	-	
Database Instance (125 GB DB) on										ĺ	İ	İ				1	
Consolidated SQL Server	Infrastructure		ANN		2,395	0				<u> </u>	<u> </u>	1			<u> </u>	į	
Database SQL Maint Server	Infrastructure		ANN		834	0		L			<u></u>	<u> </u>	$oxed{1}$				

Return on Investment Analysis

								Affects Project ROI?				Potential Cost Extens		st Extensions			
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual	i i	ŀ	Ī	T	1			1		ł
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	Y4
Database SQL Server Physical	Infrastructure		ANN		19,158	0			į	ļ		ļ					
										İ	1						!
DB Maintenance (Annual Cycle \$610)	Infrastructure		ANN		610	0			!	į .	1	!			İ	<u> </u>	į
DB Maintenance (Semi-Annual Cycle									1	1	ł	1					ļ
\$1220)	Infrastructure		ANN		1,220	0			!	!	ļ	<u> </u>					
DB Maintenance (Semi-Annual Cycle									1	İ	1				İ		į
\$2440)	Infrastructure		ANN		2,440	0			į	į .	ļ	<u> </u>					
Dedicated Virtual Server	Infrastructure		ANN		4,150	0			<u> </u>	į .	1	į			<u> </u>		İ
DB Instance Setup	Infrastructure				976	0			į	į	į	į			<u> </u>	<u> </u>	į
DBA MS SQL Database Creation on									1	1	1	-					ļ
Exisitng Instance	Infrastructure				366	0			<u> </u>	<u> </u>	<u> </u>	į			<u> </u>		
									İ	İ	1	į			1		!
Extra Small - 2 Core 8GB RAM, 500GB										-	i	•					<u> </u>
Drive, 10 GB NIC - Cloud/Virtual = \$601									İ	į	İ	į			İ	į	
On Premise Physical Server = N/A	Infrastructure		ANN			0			<u> </u>	į.	1	<u> </u>					
									1	ļ.	1	!			1		!
Small - 4 Core 16GB RAM, 500GB										İ	1	į					
Drive, 10 GB NIC - Cloud/Virtual = \$951									į	į	į	į					ļ
On Premise Physical Server = \$9,288	Infrastructure		ANN			0			<u> </u>	ļ		<u> </u>			!	ļ	
Medium - 8 Core 32GB RAM, 500GB									İ	İ	İ	İ			İ	İ	
Drive, 10 GB NIC - Cloud/Virtual =									1	ļ	1	ļ					!
\$1,702 On Premise Physical Server =									ļ	ļ	į	ļ					!
	Infrastructure		ANN			0			į	<u> </u>		į					
Large - 16 Core 64GB RAM, 500GB										-	i	•					<u> </u>
Drive, 10 GB NIC - Cloud/Virtual =									İ	į	İ	į			İ	į	
\$3,167 On Premise Physical Server =									1	1	1	-					ļ
\$10,446	Infrastructure		ANN			0		L	<u> </u>	<u> </u>	<u> </u>	<u> </u>				<u> </u>	<u> </u>
Extra Large - 40 Core 160GB RAM,									1	1	1	1			i i		
500GB Drive, 10 GB NIC -								1		1	1	İ					ļ
Cloud/Virtual = \$7,564 On Premise								1	-	1	1	1					į l
Physical Server = \$12,906	Infrastructure		ANN			0			L	L.	<u>i</u>	<u>i </u>			<u> </u>		

Return on Investment Analysis

			•
0.45	Project Cost	\/=	3/0
Cost Description	Category	Y5	Y6
IT Hours - New Development	Development Svcs		
IT Hours - System Maintenance	Development Svcs		
IT Hours - Customer Support	Development Svcs		
IT Hours - Planned Maintenance	Development Svcs		
User Hours - New Development	Development Svcs		į
User Hours - PTNE/OT	Development Svcs		
Contractor Professional Services	Development Svcs		-
PC System - Acquisition	Hardware		
PC System - Maintenance	Hardware		ļ
Notebook - Acquisition	Hardware		!
Notebook - Maintenance	Hardware		
Tablet Notebook - Acquisition	Hardware		1
Tablet Notebook - Maintenance	Hardware		
Laserprinter - Acquisition	Hardware		
Laserprinter - Maintenance	Hardware		1
Image Workstations - Acquisition	Hardware		
Image Workstations - Maintenance	Hardware		!
PC Maintenance User Owned	Hardware		
Printer Maintenance User Owned	Hardware		
File Space (100GB)	Hardware		İ
Internet Bandwidth per MB	Hardware		1
Package Software - Acquisition	Software		
Package Software - Maintenance	Software		į
Business Objects Access	Software		
Term Emulation SFTW-Acquisition	Software		
Term Emulation SFTW-Maintenance	Software		!
Server - Acquisition/Upgrade	Infrastructure		Ì
Server - Maintenance	Infrastructure		
Server Sftwre - Acquisition/Upgrade	Infrastructure		
Server Sftwre - Maintenance	Infrastructure		!
Server Rack Mount	Infrastructure		
Oracle Enterprise Per Processor -			İ
Includes Year 1 Maintenance	Infrastructure		
Oracle Enterprise Per Processor - Year			İ
2 and Beyond	Infrastructure		1
SQL Server Enterprise - Per Processor			
(4 cores) - Purchased Sept 2016-Aug			ļ
2017 - Includes Maintenance thru Aug			İ
2019	Infrastructure		
SQL Server Enterprise - Per Processor			
(4 cores) - Purchased Sept 2017-Aug			!
2018 - Includes Maintenance thru Aug			
2019	Infrastructure		

Return on Investment Analysis

	Project Cost		!
Cost Description	Category	Y5	Y6
SQL Server Enterprise - Per Processor	outogo.y		<u> </u>
(4 cores) - Purchased Sept 2018-Aug			•
2019 - Includes Maintenance thru Aug			ļ
2019 - Includes Maintenance thu Aug 2019	Infrastructure		•
SQL Server Enterprise - Maintenance,	iiiiasiiuciure		}
Per Processor (4 cores) - Sept 2019			ļ
, ,	Infrastructure		ļ
and Beyond	mirastructure		
SQL Server Standard - Per Processor			ļ
(4 cores) - Purchased Sept 2016-Aug			ł
2017 - Includes Maintenance thru Aug			}
2019	Infrastructure		İ
SQL Server Standard - Per Processor			}
(4 cores) - Purchased Sept 2017-Aug			İ
2018 - Includes Maintenance thru Aug			ļ
2019	Infrastructure		İ
SQL Server Standard - Per Processor			Ì
(4 cores) - Purchased Sept 2018-Aug			ļ
2019 - Includes Maintenance thru Aug			1
2019	Infrastructure		!
SQL Server - Standard Maintenance,			İ
Per Processor (4 cores) - Sept 2019			ļ
and Beyond	Infrastructure		ļ
Websphere Basic Per Processor			
Single/Dual Core - Includes Year 1			ļ
Maintenance	Infrastructure		ļ
Wall to large	illinaoti aotaro		1
Websphere Basic Per Processor			į
Single/Dual Core - Year 2 and Beyond	Infrastructure		
Websphere ND Per Processor	imastructure		i I
Single/Dual Core - Includes Year 1			•
Maintenance	Infrastructure		į
Maintenance	illiasiluciule		1
Wahanhara ND Dar Draggar			ļ
Websphere ND Per Processor	Infrastructura		1
Single/Dual Core - Year 2 and Beyond	Infrastructure		1
SSL Certificate	Infrastructure		1
Internet Access	Infrastructure		1
Imperva Web Application Firewall			İ
(External Web Applications Only)	Infrastructure		<u> </u>
App Code Directories on Consolidated			į
IIS Server (Virtual)	Infrastructure		<u> </u>
Database (5 GB) on Consolidated SQL			1
Instance Server	Infrastructure		İ
Database Instance (125 GB DB) on			!
Consolidated SQL Server	Infrastructure		1
Database SQL Maint Server	Infrastructure		

Return on Investment Analysis

	Project Cost		
Cost Description	Category	Y5	Y6
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		
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		

Return on Investment Analysis

Cost Summary

	Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
D	evelopment Services:							
	IT Hours - New Development	64,185						64,185
	IT Hours - System Maintenance							
	IT Hours - Customer Support IT Hours - Planned Maintenance							
	IT Hours - Planned Maintenance							
	User Hours - New Development							
	User Hours - PTNE/OT							
	Contractor Professional Services							
	Development Services Subtotal:	64,185						64,185
н	ardware:							
	Hardware Subtotal:							
S	oftware:							
П								
П	Software Subtotal:							
In	frastructure:							
П								
П								
	Infrastructure Subtotal							
Ti	raining:							
Ħ								
							1	
	Training Subtotal:						1	
o	ther:							
Ĕ							1	
							1	
	Other Subtotal:						1	
С	osts Total:	64,185					1	64,185
_	00.0 10.0	U-7, 10U						07,100

Return on Investment Analysis

Assumptions

Date	Assumption Description