Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Facilities Resource Planning System **Project ID: D19148RM**

Leadership Group: Land		
Department: Facilities Management	**Division:** Facilities Planning & Engineering	
Project Sponsor: Jason Warner / Art Holdsworth	**Date Requested: 2/1/18**	**PM Customer No. 148**
Request Type:	***New Development X*** ***Enhancement*** ***Customer Support*** ***Planned System Maintenance or Upgrade***	
IT Team Name: Infrastructure and GIS	**IT Team No: 1**	
Project Manager/Leader: Mike Dagle		
Account Number: TBD	**Account Description:** TBD	**Customer Name:** Facilities Mgmt
Grant Funded? Yes **No**	**Mandate?** **Yes** **No** **Mandate Source:**	

Project Goal

To implement a resource allocation system so that Facilities Planning & Engineering (FP&E) can more easily and accurately perform resource planning and reporting.

Business Objective

To implement a resource management solution that assists FP&E with resource planning and prioritization of projects.

To modify existing project management documentation and processes to align with new resource management solution.

Major Deliverables

- Detailed Business Requirements / Documentation
- Contract Negotiations / Amendment with Implementation Vendor
- Project management/resource allocation solution
- Reports and portlets related to actual hours worked to staff availability and other resource management metrics
- Disaster Recovery Toolkit and Service Center documentation, if necessary

Approach

- Develop Detailed Project Plan
- Develop Detailed Business Requirements, including reporting needs
- Execute contract amendment and licensing model
- Develop Implementation Plan with vendor
- Begin implementation
    - Develop User Documentation / modify existing documentation of project management processes

  - Develop User Acceptance Criteria
  - Train users on system
  - Go Live
  - Acquire User Acceptance Sign off
- Develop Disaster Recovery Toolkit and Service Center documentation
- Conduct Change Control
- Release new changes/data into production

Research & Analysis

Gartner Research Recommendation

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users 12

Divisions Facilities Management – Planning, and Engineering

Leadership Groups Land

Risk

Business Environment High – Product dramatically changes 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:	Art Holdsworth / Jason Warner	As needed

Project Name: Facilities Resource Planning System **Project ID: D19148RM**

Facilities

- None

Technical

- Clarity, using the Modern UX is the identified resource management solution
- Existing vendor Rego will manage the implementation

Funding

- None

Other

- The resulting system will assist FM with:
    - Resource planning
        - Total projects/work orders assigned to each staff member
        - Total allocated vs available hours per staff member
        - Future project assignments for each staff member
    - Project and resource status reporting in hours vs dollars for both internal and customer consumption
        - Estimated vs tracked hours assigned to each project/work order
    - Accurate assessment of current and future work
    - Prioritization of projects

Priority

- TBD

Constraints

- None

Exclusions

- None

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PROJECT PHASE AUTHORIZATION

Phase(s):		
Total Estimated Application Services	**Hours: 465**	
Total Estimated Technical Systems	**Hours: 59**	
Total Estimated CLEMIS	**Hours:**	
Total Estimated Internal Services	**Hours: 102**	
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: 626**	**Cost: $103,290**

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PROJECT COMPLETION AUTHORIZATION

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

Facilities Resource Planning System - Size Estimate (+/- 10% to 50%)

	Type	ID	Task Name	Estimated Hours
3	**3**	**000000**	**PROJECT MANAGEMENT**	**198**
4	**Phase**	**100000**	**DEVELOP RFP & SELECT VENDOR**	
5	**Phase**	**200000**	**BUSINESS REQUIREMENTS**	**164**
6	**Phase**	**300000**	**DESIGN SYSTEM ARCHITECTURE**	**48**
7	**Phase**	**400000**	**IMPLEMENT VENDOR APPLICATION**	**138**
8	**Phase**	**500000**	**IMPLEMENTATION PHASE**	**70**
9	**Phase**	**600000**	**POST IMPLEMENTATION SUPPORT**	**8**
10				626

Project ID: D19148RM

Oakland County --Facilities Resource Planning System

Return on Investment Analysis

As Of: 02/01/2018

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:	56,588	58,286	60,035	61,836	63,691	65,601	366,037
Costs:							
Development Services Subtotal:	144,290	8,333	8,416	8,500	8,585	8,671	186,794
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	17,000	3,000	3,000	3,000	3,000	3,000	32,000
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	56,588	58,286	60,035	61,836	63,691	65,601	366,037
Annual Total Costs	161,290	11,333	11,416	11,500	11,585	11,671	218,794
Annual Return on Investment	(104,702)	46,954	48,619	50,336	52,106	53,931	147,243
Annual Costs/Savings Ratio	285.02%	19.44%	19.02%	18.60%	18.19%	17.79%	
Project Cumulative Statistics:							
Cumulative Total Savings	56,588	114,874	174,909	236,745	300,436	366,037	366,037
Cumulative Total Costs	161,290	172,623	184,038	195,538	207,123	218,794	218,794
Cumulative Return on Investment	(104,702)	(57,748)	(9,129)	41,206	93,312	147,243	147,243
Cumulative Cost/Savings Ratio	285.02%	150.27%	105.22%	82.59%	68.94%	59.77%	59.77%
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:			

Oakland County --Facilities Resource Planning System

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
Solution that reports in hours vs dollars aligns with management-requested status reports.	Intangible Benefit					0	
Tracking project duration, as well as hours, allows Supervisor to better understand which projects can be completed within a given time frame.	Intangible Benefit					0	
Having all project information in one location facilitates FM leadership group and Supervisor review of new project requests.	Intangible Benefit						
Having all project information in one location allows an FM leadership group and the Supervisor to prioritize projects.	Intangible Benefit						
Project Management software allows Supervisor to perform long-range planning.	Intangible Benefit						
Improved reporting functionality saves Supervisor time summarizing information for both management and customers.	Cost Avoidance		ANN	1	15,926	15,926	1.030
Eliminating paper time entry increases accuracy.	Intangible Benefit					0	
Retains historic baseline information regarding dates and original estimates.	Intangible Benefit					0	
Eliminating the copying staff members perform every 2 weeks so that Supervisor can review project status saves staff time.	Cost Avoidance		ANN	1	10,800	10,800	1.030
Supervisor's project view time would be reduced by having software that identifies issues, rather than manually reviewing prints.	Cost Avoidance		ANN	1	29,862	29,862	1.030
						0	
						0	

Oakland County --Facilities Resource Planning System

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
Solution that reports in hours vs dollars aligns with management-requested status reports.	Intangible Benefit												
Tracking project duration, as well as hours, allows Supervisor to better understand which projects can be completed within a given time frame.	Intangible Benefit												
Having all project information in one location facilitates FM leadership group and Supervisor review of new project requests.	Intangible Benefit												
Having all project information in one location allows an FM leadership group and the Supervisor to prioritize projects.	Intangible Benefit												
Project Management software allows Supervisor to perform long-range planning.	Intangible Benefit												
Improved reporting functionality saves Supervisor time summarizing information for both management and customers.	Cost Avoidance	x	x	x	x	x	x	15,926.40	16,404.19	16,896.32	17,403.21	17,925.30	18,463.06
Eliminating paper time entry increases accuracy.	Intangible Benefit												
Retains historic baseline information regarding dates and original estimates.	Intangible Benefit												
Eliminating the copying staff members perform every 2 weeks so that Supervisor can review project status saves staff time.	Cost Avoidance	x	x	x	x	x	x	10,800.00	11,124.00	11,457.72	11,801.45	12,155.50	12,520.16
Supervisor's project view time would be reduced by having software that identifies issues, rather than manually reviewing prints.	Cost Avoidance	x	x	x	x	x	x	29,862.00	30,757.86	31,680.60	32,631.01	33,609.94	34,618.24

Oakland County --Facilities Resource Planning System

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:								
	Improved reporting functionality saves Supervisor time summarizing information for both management and customers.	15,926	16,404	16,896	17,403	17,925	18,463	103,018
	Supervisor's project view time would be reduced by having software that identifies issues, rather than manually reviewing prints.	29,862	30,758	31,681	32,631	33,610	34,618	193,160
	Eliminating the copying staff members perform every 2 weeks so that Supervisor can review project status saves staff time.	10,800	11,124	11,458	11,801	12,155	12,520	69,859
	Cost Avoidance Subtotal:	***56,588***	***58,286***	***60,035***	***61,836***	***63,691***	***65,601***	***366,037***
Intangible Benefit:								
	Solution that reports in hours vs dollars aligns with management-requested status reports.							
	Tracking project duration, as well as hours, allows Supervisor to better understand which projects can be completed within a given time frame.							
	Having all project information in one location facilitates FM leadership group and Supervisor review of new project requests.							
	Having all project information in one location allows an FM leadership group and the Supervisor to prioritize projects.							

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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
	Project Management software allows Supervisor to perform long-range planning.							
	Eliminating paper time entry increases accuracy.							
	Retains historic baseline information regarding dates and original estimates.							
Savings Total:		***56,588***	***58,286***	***60,035***	***61,836***	***63,691***	***65,601***	***366,037***

Oakland County --Facilities Resource Planning System

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			626	165	103,290	1.010	x					
IT Hours - System Maintenance	Development Svcs			10	165	1,650	1.010		x	x	x	x	x
IT Hours - Customer Support	Development Svcs			30	165	4,950	1.010		x	x	x	x	x
IT Hours - Planned Maintenance	Development Svcs			10	165	1,650	1.010		x	x	x	x	x
User Hours - New Development	Development Svcs					0							
User Hours - PTNE/OT	Development Svcs					0							
Contractor Professional Services	Development Svcs		EA			41,000		x					
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					17,000		x					
Package Software - Maintenance	Software					3,000			x	x	x	x	x
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 --Facilities Resource Planning System

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				4,429	0							
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 --Facilities Resource Planning System

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										

Oakland County --Facilities Resource Planning System

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										
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $1,702 On Premise Physical Server = $9,751	Infrastructure		ANN										
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $3,167 On Premise Physical Server = $10,446	Infrastructure		ANN										
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $12,906	Infrastructure		ANN										
Project Staff Training	Training												
User Training	Training												

Oakland County --Facilities Resource Planning System

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	103,290.00					
IT Hours - System Maintenance	Development Svcs		1,666.50	1,683.17	1,700.00	1,717.00	1,734.17
IT Hours - Customer Support	Development Svcs		4,999.50	5,049.50	5,099.99	5,150.99	5,202.50
IT Hours - Planned Maintenance	Development Svcs		1,666.50	1,683.17	1,700.00	1,717.00	1,734.17
User Hours - New Development	Development Svcs						
User Hours - PTNE/OT	Development Svcs						
Contractor Professional Services	Development Svcs	41,000.00					
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	17,000.00					
Package Software - Maintenance	Software		3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
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 --Facilities Resource Planning System

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						
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 --Facilities Resource Planning System

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 --Facilities Resource Planning System

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						
Project Staff Training	Training						
User Training	Training						

Project ID: D19148RM

Oakland County --Facilities Resource Planning System

Return on Investment Analysis

As Of: 02/01/2018

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Development Services:							
IT Hours - New Development	103,290						103,290
IT Hours - System Maintenance		1,667	1,683	1,700	1,717	1,734	8,501
IT Hours - Customer Support		5,000	5,049	5,100	5,151	5,202	25,502
IT Hours - Planned Maintenance		1,667	1,683	1,700	1,717	1,734	8,501
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services	41,000						41,000
Development Services Subtotal:	***144,290***	***8,333***	***8,416***	***8,500***	***8,585***	***8,671***	***186,794***
Hardware:							
Hardware Subtotal:							
Software:							
Package Software - Acquisition	17,000						17,000
Package Software - Maintenance		3,000	3,000	3,000	3,000	3,000	15,000
Software Subtotal:	***17,000***	***3,000***	***3,000***	***3,000***	***3,000***	***3,000***	***32,000***
Infrastructure:							
Infrastructure Subtotal							
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	***161,290***	***11,333***	***11,416***	***11,500***	***11,585***	***11,671***	***218,794***

Oakland County --Facilities Resource Planning System

Return on Investment Analysis

Assumptions

Date	Assumption Description
07-Mar-16	A Supervisor's hourly rate is $66.36.
07-Mar-16	An FM's project manager rate is $60/hour.
14-Mar-16	Approximately 20 hours/month of a Supervisor's time could be saved by this solution, for 20*$66.36 = $1327.20/month * 12 months = $15926.40 savings per year.
14-Mar-16	Assuming FM project managers print approximately 45 projects every 2 weeks for Supervisor's reviews. It takes approximately 10 min/project to print, for a total of (7.5*2)*12 = 180 hours year. 180*$60/hour = $10,800/year savings.
14-Mar-16	Assuming Supervisor currently reviews 45 projects every 2 weeks, and spends 45 minutes per project, for a total of 67.5 hours/month ((45*45)*2) or 810 hours/year. New software could reduce this time to 20 minutes per project, for a total of 30 hours/month, or 360 hours/year. 810-360 = 450 hours saved * $66.36 = $29,862/year.