

Oakland County Department of Information Technology Project Scope and Approach

Project Name: P & R Technology Implementation Program – Yr1 Project ID: D98561TP

Leadership Group: Land			
Department: Parks & Recreation		Division: Parks & Recreation	
Project Sponsor: Dan Stencil	Date Requested: 9.9.08	PM Customer No. 561	
Request Type:	<i>XX New Development</i>	<i>Enhancement</i>	<i>Customer Support</i>
	<i>Planned System Maintenance or Upgrade</i>		
IT Team Name: Land Implementation Services		IT Team No: 9	
Project Manager/Leader: Tammi Shepherd			
Account Number: 77100	Account Description: Yr 1 - Program Managemnt	Customer Name:	Parks & Recreation
Grant Funded? Yes <i>XX No</i>	Mandate? Yes <i>XX No</i>	Mandate Source:	

Project Goal

To implement Year 1 initiatives identified in the Parks & Recreation Technology Roadmap so that the Parks & Recreation Department may streamline their operations through use of technology.

Business Objective

Implement the following initiatives:

- Network connectivity to manned park locations not currently connected to OakNet
- Hardware including PC, mobile devices, and printers
- Centralized POS system
- Asset theme information that will support the deployment of a Computerized Maintenance Management System

Major Deliverables

Detailed project plans
 Communication plan & reporting structure
 Network connectivity to manned park locations not currently connected to OakNet
 Hardware including PC's, mobile devices, and printers
 Centralized Point of Sale System
 Asset theme information that will support Computerized Maintenance Management System

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

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Approach

Develop detailed project plans and supporting project documentation
Design and implement network connectivity to manned park locations
Design and implement centralized POS System
Design, develop and implement GIS data & maintenance procedures

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users 100-150

Divisions Parks & Recreation

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:

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

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	<u>Name</u>	<u>Hours per Day</u>
<u>Role:</u>		
Project Sponsor:	Dan Stencil	As Needed

Facilities

- IT conference rooms as needed

Technical

- Existing COTS Point of Sale system will be reconfigured as a centralized system.

Funding

- Funds have been appropriated in the FY09 Parks & Recreation Budget.

Other

- Detailed Scope & Approach documents will be developed for each initiative. The ROI will be created and maintained at the program level.

Priority

Constraints

-

Exclusions

-
-

**Oakland County
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Project Scope and Approach**

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PROJECT PHASE AUTHORIZATION

Phase(s): ALL	
Total Estimated Application Services	Hours: 4,608 Cost: 560,436
Total Estimated Technical Systems	Hours: 1,310 Cost: 6,100
Total Estimated CLEMIS	Hours: Cost:
Total Estimated Internal Services	Hours: Cost:
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: 5,918	Cost: 566,536
Preliminary Estimated Development for Future Phases	Hours:	Cost:
Grand Total Estimated Development	Hours: 5,918	Cost: 566,536

Oakland County Department of Information Technology Project Scope and Approach

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PROJECT COMPLETION AUTHORIZATION

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

P & R Technology Implementation Program - Yr1 - Size Estimate (+/- 10% to 50%)					
[All Resources]					
Window Help					
Type	ID	Task Name	Estimated Hours	Estimated Cost	Estimate Notes
Phase	000000	PROJECT MANAGEMENT	1,638	\$198,096.0	
Phase	200000	COMPLETE P & R DATA THEME	1,650	\$201,300.0	
Phase	300000	NETWORK P & R SITES	1,291	\$35,502.00	
Phase	400000	INSTALL PERSONAL COMPUTING DEVICES	440	\$29,280.00	
Phase	500000	IMPLEMENT POINT OF SALE (POS) SYSTEM	899	\$102,358.0	
			5,918	\$566,536.00	

Information Technology Strategic Plan Alignment

D98561TP - P & R Technology Implementation Program - Yr1

3.1 - Provide an Enhanced Application Service Offering

- | | |
|---|--|
| 3.1.1 - Increase application integration through web services <input type="checkbox"/> | 3.1.5 - Improve the quality, reliability and availability of all applications <input checked="" type="checkbox"/> |
| 3.1.2 - Research and develop a Constituent Relationship Management (CRM) strategy <input type="checkbox"/> | 3.1.6 - Increase the agility and responsiveness of business units by expanding customer analytics <input checked="" type="checkbox"/> |
| 3.1.3 - Promote mobility and location integration in business applications <input checked="" type="checkbox"/> | 3.1.7 - Leverage the County's Internet presence and portal as a branded consolidated point of access to all County information and services through a web browser <input type="checkbox"/> |
| 3.1.4 - Utilize ecommerce platform to offset costs and expand product offerings to customers <input type="checkbox"/> | 3.1.8 - Centralize identity and access management for all applications and content <input type="checkbox"/> |

3.2 - Enhance ability to provide effective and timely customer (County departments and CVTs) service

- | | |
|--|--|
| 3.2.1 - Implement a centralized service center strategy to provide a single point of contact for service delivery <input type="checkbox"/> | 3.2.4 - Provide a high-quality training program to empower employees through technology <input type="checkbox"/> |
| 3.2.2 - Implement the IT Infrastructure Library (ITIL) best practice framework for IT Service Management <input type="checkbox"/> | 3.2.5 - Develop a formalized customer communication plan <input type="checkbox"/> |
| 3.2.3 - Define a service and support strategy that clearly identifies the IT service provided <input type="checkbox"/> | 3.2.6 - Build IT Staff expertise through professional development <input type="checkbox"/> |
| | 3.2.7 - Expand capacity through ongoing organizational review and selective outsourcing <input type="checkbox"/> |

3.3 - Implement a Standardized Infrastructure Strategy

- | | |
|---|--|
| 3.3.1 - Deliver services using a shared technology infrastructure wherever possible <input checked="" type="checkbox"/> | 3.3.5 - Establish support cost model and SLA for all offerings outside 3.3.4 <input type="checkbox"/> |
| 3.3.2 - Implement a Microsoft infrastructure strategy <input type="checkbox"/> | 3.3.6 - Improve service availability through network design and management strategies <input type="checkbox"/> |
| 3.3.3 - Implement a consolidated security strategy <input type="checkbox"/> | 3.3.7 - Establish enhanced capacity planning and recovery management strategies <input type="checkbox"/> |
| 3.3.4 - Establish a standard personal computing hardware and software product suite, SLA, and replacement schedule for all County personal computers <input type="checkbox"/> | |

Oakland County -- P R Technology Implementation Program - Yr1

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	5,320	5,444	5,571	5,702	5,837	27,874
Cost Avoidance Subtotal:	0	111,598	114,946	118,395	121,947	125,605	592,491
Intangible Subtotal:	0	0	0	0	0	0	0
Costs:							
Development Services Subtotal:	737,596	24,400	24,400	24,400	24,400	24,400	859,596
Hardware Subtotal:	260,044	289,720	289,720	289,720	289,720	289,720	1,708,644
Software Subtotal:	74,940	43,667	43,667	43,667	43,667	43,667	293,275
Infrastructure Subtotal:	426,910	50,424	50,424	50,424	50,424	50,424	679,030
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
Annual Statistics:							
Annual Total Savings	0	116,918	120,390	123,966	127,649	131,442	620,365
Annual Total Costs	1,499,490	408,211	408,211	408,211	408,211	408,211	3,540,545
Annual Return on Investment	(1,499,490)	(291,293)	(287,821)	(284,245)	(280,562)	(276,769)	(2,920,180)
Annual Costs/Savings Ratio	0.00%	349.14%	339.07%	329.29%	319.79%	310.56%	
Project Cumulative Statistics:							
Cumulative Total Savings	0	116,918	237,308	361,274	488,923	620,365	620,365
Cumulative Total Costs	1,499,490	1,907,701	2,315,912	2,724,123	3,132,334	3,540,545	3,540,545
Cumulative Return on Investment	(1,499,490)	(1,790,783)	(2,078,604)	(2,362,849)	(2,643,411)	(2,920,180)	(2,920,180)
Cumulative Cost/Savings Ratio	0.00%	1631.65%	975.91%	754.03%	640.66%	570.72%	570.72%
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: _____						
Costs (including IT Resources) Reviewed By Technical Services Manager	Date: _____						

Oakland County -- P R Technology Implementation Program - Yr1

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
Asset Theme Data Development							
Ability to make use of County Enterprise data	Intangible Benefit					0	
Centralized GIS data that can be easily utilized for planning purposes	Intangible Benefit					0	
Network Connectivity							
Access to Oaksource to get info about Contracts from Purchasing	Cost Avoidance		HR	520	30	15,600	1.030
Reduction of staff time to print and distribute reports, budgets and various communications	Cost Avoidance		HR	970	30	29,100	1.030
Reduction of staff time dealing with problems related to internet and connectivity issues	Cost Avoidance		HR	936	30	28,080	1.030
Time saved by having access to K drive and data from all parks	Cost Avoidance		HR	468	30	14,040	1.030
Increased network speeds to access data, process credit cards, use internet, check weather, check email, etc	Intangible Benefit					0	
Increase in fundamental business continuity	Intangible Benefit					0	
Central location of data will help produce consistent and accurate reports	Intangible Benefit					0	
Ability to host centralized POS system	Intangible Benefit					0	
Elimination of Satellite internet (L/O)	Tangible Benefit		ANN	1	1,200	1,200	
Hardware Refresh							
Consistent PC build and deployment, no research required to purchase PCs and other hardware, reduction of technical support issues to deal with	Cost Avoidance		HR	390	30	11,700	1.030

Oakland County -- P R Technology Implementation Program - Yr1

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
Reduction of hardware replacement cost for non-IT supported PCs	Tangible Benefit		EA	4	1,000	4,000	1.030
Point of Sales System							
Expanding POS System to all locations, reduce double entries (G/O, I/O, A/O)	Cost Avoidance		HR	378	18	6,804	1.030
Employee time saved by no longer needing to manually collect zip codes from campers (G/O & A/O)	Cost Avoidance		HR	252	12	3,024	1.030
Improved efficiency getting customers into the park or onto the golf course	Intangible Benefit					0	
Increased functions and capabilities of using full features of POS System	Intangible Benefit					0	
Track repeat customers for marketing purposes	Intangible Benefit					0	
Consolidation of POS system may provide more leverage with the vendor	Intangible Benefit					0	
						0	
						0	
						0	
						0	

Oakland County -- P R Technology Implementation Program - Yr1

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
Asset Theme Data Development													
Ability to make use of County Enterprise data	Intangible Benefit												
Centralized GIS data that can be easily utilized for planning purposes	Intangible Benefit												
Network Connectivity													
Access to Oaksource to get info about Contracts from Purchasing	Cost Avoidance	X	X	X	X	X		16,068.00	16,550.04	17,046.54	17,557.94	18,084.68	
Reduction of staff time to print and distribute reports, budgets and various communications	Cost Avoidance	X	X	X	X	X		29,973.00	30,872.19	31,798.36	32,752.31	33,734.88	
Reduction of staff time dealing with problems related to internet and connectivity issues	Cost Avoidance	X	X	X	X	X		28,922.40	29,790.07	30,683.77	31,604.29	32,552.42	
Time saved by having access to K drive and data from all parks	Cost Avoidance	X	X	X	X	X		14,461.20	14,895.04	15,341.89	15,802.14	16,276.21	
Increased network speeds to access data, process credit cards, use internet, check weather, check email, etc	Intangible Benefit												
Increase in fundamental business continuity	Intangible Benefit												
Central location of data will help produce consistent and accurate reports	Intangible Benefit												
Ability to host centralized POS system	Intangible Benefit												
Elimination of Satellite internet (L/O)	Tangible Benefit	X	X	X	X	X		1,200.00	1,200.00	1,200.00	1,200.00	1,200.00	
Hardware Refresh													
Consistent PC build and deployment, no research required to purchase PCs and other hardware, reduction of technical support issues to deal with	Cost Avoidance	X	X	X	X	X		12,051.00	12,412.53	12,784.91	13,168.45	13,563.51	

Oakland County -- P R Technology Implementation Program - Yr1

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
Reduction of hardware replacement cost for non-IT supported PCs	Tangible Benefit	X	X	X	X	X		4,120.00	4,243.60	4,370.91	4,502.04	4,637.10	
Point of Sales System													
Expanding POS System to all locations, reduce double entries (G/O, I/O, A/O)	Cost Avoidance	X	X	X	X	X		7,008.12	7,218.36	7,434.91	7,657.96	7,887.70	
Employee time saved by no longer needing to manually collect zip codes from campers (G/O & A/O)	Cost Avoidance	X	X	X	X	X		3,114.72	3,208.16	3,304.41	3,403.54	3,505.64	
Improved efficiency getting customers into the park or onto the golf course	Intangible Benefit												
Increased functions and capabilities of using full features of POS System	Intangible Benefit												
Track repeat customers for marketing purposes	Intangible Benefit												
Consolidation of POS system may provide more leverage with the vendor	Intangible Benefit												

Oakland County -- P R Technology Implementation Program - Yr1

Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
Elimination of Satellite internet (L/O)		1,200	1,200	1,200	1,200	1,200	6,000
Reduction of hardware replacement cost for non-IT supported PCs		4,120	4,244	4,371	4,502	4,637	21,874
<i>Tangible Benefits Subtotal:</i>		5,320	5,444	5,571	5,702	5,837	27,874
Cost Avoidance:							
Access to Oaksourse to get info about Contracts from Purchasing		16,068	16,550	17,047	17,558	18,085	85,307
Reduction of staff time to print and distribute reports, budgets and various communications		29,973	30,872	31,798	32,752	33,735	159,131
Reduction of staff time dealing with problems related to internet and connectivity issues		28,922	29,790	30,684	31,604	32,552	153,553
Time saved by having access to K drive and data from all parks		14,461	14,895	15,342	15,802	16,276	76,776
Consistent PC build and deployment, no research required to purchase PCs and other hardware, reduction of technical support issues to deal with		12,051	12,413	12,785	13,168	13,564	63,980
Expanding POS System to all locations, reduce double entries (G/O, I/O, A/O)		7,008	7,218	7,435	7,658	7,888	37,207
Employee time saved by no longer needing to manually collect zip codes from campers (G/O & A/O)		3,115	3,208	3,304	3,404	3,506	16,536
<i>Cost Avoidance Subtotal:</i>		111,598	114,946	118,395	121,947	125,605	592,491

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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
Intangible Benefit:							
Ability to make use of County Enterprise data	0	0	0	0	0	0	0
Centralized GIS data that can be easily utilized for planning purposes	0	0	0	0	0	0	0
Increased network speeds to access data, process credit cards, use internet, check weather, check email, etc	0	0	0	0	0	0	0
Increase in fundamental business continuity	0	0	0	0	0	0	0
Central location of data will help produce consistent and accurate reports	0	0	0	0	0	0	0
Ability to host centralized POS system	0	0	0	0	0	0	0
Improved efficiency getting customers into the park or onto the golf course	0	0	0	0	0	0	0
Increased functions and capabilities of using full features of POS System	0	0	0	0	0	0	0
Track repeat customers for marketing purposes	0	0	0	0	0	0	0
Consolidation of POS system may provide more leverage with the vendor	0	0	0	0	0	0	0
							0
<i>Intangible Subtotal:</i>	0	0	0	0	0	0	0
Savings Total:		116,918	120,390	123,966	127,649	131,442	620,365

Oakland County -- P R Technology Implementation Program - Yr1

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	4,608	122	562,176		x						
IT Hours - Technical Systems	Development Svcs		HR	1,260	122	153,720		x						
IT Hours - Technical Systems DBA	Development Svcs		HR	50	122	6,100		x						
IT Hours - System Maintenance	Development Svcs		HR	50	122	6,100			x	x	x	x	x	
IT Hours - Customer Support	Development Svcs		HR	100	122	12,200			x	x	x	x	x	
IT Hours - Planned Maintenance	Development Svcs		HR	50	122	6,100			x	x	x	x	x	
User Hours - New Development	Development Svcs					0								
User Hours - PTNE/OT	Development Svcs					0								
Contractor Professional Services - (for Active POS system)	Development Svcs		EA	1	15,600	15,600		x						
PC System, Notebooks, Printers - Acquisition	Hardware		EA	1	225,600	225,600		x						
PC System - Acquisition (high performance-used for POS site server)	Hardware		EA	10	3,444	34,444		x						
PC System, Notebooks, Printers - Maintenance	Hardware		ANN	1	289,720	289,720			x	x	x	x	x	
PC System - Acquisition	Hardware					814								
PC System - Maintenance	Hardware					2,304								
Notebook - Acquisition	Hardware					1,223								
Notebook - Maintenance	Hardware					2,372								
Tablet Notebook - Acquisition	Hardware					2,012								
Tablet Notebook - Maintenance	Hardware													
Laserprinter - Acquisition	Hardware					1,432								
Laserprinter - Maintenance	Hardware					1,104								
Image Workstations - Acquisition	Hardware													
Image Workstations - Maintenance	Hardware					3,496								
PC Maintenance User Owned	Hardware					2,304								
Printer Maintenance User Owned	Hardware					1,072								
Package Software - Acquisition (POS System)	Software		EA	1	40,500	40,500		x						
Package Software - Acquisition (3rd party hardware and software procured by Active)	Software		EA	1	34,440	34,440		x						
Package Software - Maintenance (POS System)	Software		ANN	1	21,875	21,875			x	x	x	x	x	

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Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?					
								Y1	Y2	Y3	Y4	Y5	Y6
Package Software - Maintenance (ArcGIS License Fee)	Software		ANN	2	10,896	21,792		x	x	x	x	x	
Business Objects Access	Software					0							
Term Emulation SFTW-Acquisition	Software					0							
Term Emulation SFTW-Maintenance	Software					0							
Networking - T1 Connection	Infrastructure		EA	6	5,801	34,806		x					
Networking - Fiber Connection	Infrastructure		EA	1	4,628	4,628		x					
Networking - Other - Implement Remaining Sites	Infrastructure		EA	1	258,076	258,076		x					
Network - Maintenance	Infrastructure		ANN	1	27,000	27,000			x	x	x	x	x
Server - Acquisition/Upgrade	Infrastructure		EA	2	8,000	16,000		x					
Server - Maintenance	Infrastructure		EA	2	360	720			x	x	x	x	x
Server Sftwre - Acquisition	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							
MS SQL Server Standard Per Processor - Includes Year 1 Maintenance	Infrastructure		EA	24	4,725	113,400		x					
MS SQL Server Standard Per Processor - Year 2 and Beyond	Infrastructure		EA	24	946	22,704			x	x	x	x	x
MS SQL Server Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure				19,693	0							
MS SQL Server Enterprise Per Processor - Year 2 and Beyond	Infrastructure				3,939	0							
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				3,506	0							
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				701	0							

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Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?						
								Y1	Y2	Y3	Y4	Y5	Y6	
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								
TBD	Infrastructure					0								
TBD	Infrastructure					0								
TBD	Infrastructure					0								
TBD	Infrastructure					0								
Internet Access	Infrastructure				180	0								
Project Staff Training	Training					0								
User Training	Training					0								

Oakland County -- P R Technology Implementation Program - Yr1

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	562,176.00					
IT Hours - Technical Systems	Development Svcs	153,720.00					
IT Hours - Technical Systems DBA	Development Svcs	6,100.00					
IT Hours - System Maintenance	Development Svcs		6,100.00	6,100.00	6,100.00	6,100.00	6,100.00
IT Hours - Customer Support	Development Svcs		12,200.00	12,200.00	12,200.00	12,200.00	12,200.00
IT Hours - Planned Maintenance	Development Svcs		6,100.00	6,100.00	6,100.00	6,100.00	6,100.00
User Hours - New Development	Development Svcs						
User Hours - PTNE/OT	Development Svcs						
Contractor Professional Services - (for Active POS system)	Development Svcs	15,600.00					
PC System, Notebooks, Printers - Acquisition	Hardware	225,600.00					
PC System - Acquisition (high performance-used for POS site server)	Hardware	34,444.00					
PC System, Notebooks, Printers - Maintenance	Hardware		289,720.00	289,720.00	289,720.00	289,720.00	289,720.00
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						
Package Software - Acquisition (POS System)	Software	40,500.00					
Package Software - Acquisition (3rd party hardware and software procured by Active)	Software	34,440.00					
Package Software - Maintenance (POS System)	Software		21,875.00	21,875.00	21,875.00	21,875.00	21,875.00

Oakland County -- P R Technology Implementation Program - Yr1

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Package Software - Maintenance (ArcGIS License Fee)	Software		21,792.00	21,792.00	21,792.00	21,792.00	21,792.00
Business Objects Access	Software						
Term Emulation SFTW-Acquisition	Software						
Term Emulation SFTW-Maintenance	Software						
Networking - T1 Connection	Infrastructure	34,806.00					
Networking - Fiber Connection	Infrastructure	4,628.00					
Networking - Other - Implement Remaining Sites	Infrastructure	258,076.00					
Network - Maintenance	Infrastructure		27,000.00	27,000.00	27,000.00	27,000.00	27,000.00
Server - Acquisition/Upgrade	Infrastructure	16,000.00					
Server - Maintenance	Infrastructure		720.00	720.00	720.00	720.00	720.00
Server Sftwre - Acquisition	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						
MS SQL Server Standard Per Processor - Includes Year 1 Maintenance	Infrastructure	113,400.00					
MS SQL Server Standard Per Processor - Year 2 and Beyond	Infrastructure		22,704.00	22,704.00	22,704.00	22,704.00	22,704.00
MS SQL Server Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure						
MS SQL Server Enterprise Per Processor - Year 2 and Beyond	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						

Oakland County -- P R Technology Implementation Program - Yr1
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
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						
TBD	Infrastructure						
TBD	Infrastructure						
TBD	Infrastructure						
TBD	Infrastructure						
Internet Access	Infrastructure						
Project Staff Training	Training						
User Training	Training						

Oakland County -- P R Technology Implementation Program - Yr1

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	562,176						562,176
IT Hours - Technical Systems	153,720						153,720
IT Hours - Technical Systems DBA	6,100						6,100
IT Hours - System Maintenance		6,100	6,100	6,100	6,100	6,100	30,500
IT Hours - Customer Support		12,200	12,200	12,200	12,200	12,200	61,000
IT Hours - Planned Maintenance		6,100	6,100	6,100	6,100	6,100	30,500
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services - (for Active POS system)	15,600						15,600
Development Services Subtotal:	737,596	24,400	24,400	24,400	24,400	24,400	859,596
Hardware:							
PC System, Notebooks, Printers - Acquisition	225,600						225,600
PC System - Acquisition (high performance-used for POS site server)	34,444						34,444
PC System, Notebooks, Printers - Maintenance		289,720	289,720	289,720	289,720	289,720	1,448,600
Hardware Subtotal:	260,044	289,720	289,720	289,720	289,720	289,720	1,708,644
Software:							
Package Software - Acquisition (POS System)	40,500						40,500
Package Software - Acquisition (3rd party hardware and software procured by Active)	34,440						34,440
Package Software - Maintenance (POS System)		21,875	21,875	21,875	21,875	21,875	109,375
Package Software - Maintenance (ArcGIS License Fee)		21,792	21,792	21,792	21,792	21,792	108,960
Software Subtotal:	74,940	43,667	43,667	43,667	43,667	43,667	293,275

Oakland County -- P R Technology Implementation Program - Yr1

Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Infrastructure:							
Networking - T1 Connection	34,806						34,806
Networking - Fiber Connection	4,628						4,628
Networking - Other - Implement Remaining Sites	258,076						258,076
Network - Maintenance		27,000	27,000	27,000	27,000	27,000	135,000
Server - Acquisition/Upgrade	16,000						16,000
Server - Maintenance		720	720	720	720	720	3,600
MS SQL Server Standard Per Processor - Includes Year 1 Maintenance	113,400						113,400
MS SQL Server Standard Per Processor - Year 2 and Beyond		22,704	22,704	22,704	22,704	22,704	113,520
<i>Infrastructure Subtotal</i>	426,910	50,424	50,424	50,424	50,424	50,424	679,030
Training:							
<i>Training Subtotal:</i>							
Other:							
<i>Other Subtotal:</i>							
Costs Total:	1,499,490	408,211	408,211	408,211	408,211	408,211	3,540,545

Oakland County -- P R Technology Implementation Program - Yr1

Return on Investment Analysis

Assumptions

Date	Assumption Description																												
17-Oct-08	There are 4 initiatives under this program project that originated from a P & R technology assessment: Asset Theme Data Development, Network Connectivity, Hardware Refresh, and Point of Sale System.																												
	Overall IT Labor Cost Assumptions -																												
	<p>The P & R Technology Plan for the first year estimated labor for each initiative and included 9% of contingency (\$136,000) that was converted to 1009 hours*. 83 of the contingency hours were allocated to the sizing effort for this program project and the remainder was distributed to the initiatives as noted below. The original Plan did not detail hours for a current inventory assessment so a significant amount of the contingency was allocated to the Hardware Refresh.</p> <table border="1"> <thead> <tr> <th data-bbox="415 532 625 560">INITIATIVE</th> <th data-bbox="688 532 898 560">PLAN ESTIMATE</th> <th data-bbox="898 532 1108 560">CONTINGENCY</th> <th data-bbox="1108 532 1806 560">TOTAL (includes core, PM, Scope and Contingency for each initiative)</th> </tr> </thead> <tbody> <tr> <td data-bbox="415 560 625 587">Asset Theme Data</td> <td data-bbox="688 560 898 587">2049</td> <td data-bbox="898 560 1108 587">201</td> <td data-bbox="1108 560 1806 587">2250</td> </tr> <tr> <td data-bbox="415 587 625 615">Network Connectivity</td> <td data-bbox="688 587 898 615">1660</td> <td data-bbox="898 587 1108 615">100</td> <td data-bbox="1108 587 1806 615">1760</td> </tr> <tr> <td data-bbox="415 615 625 643">Hardware Refresh</td> <td data-bbox="688 615 898 643">200</td> <td data-bbox="898 615 1108 643">400</td> <td data-bbox="1108 615 1806 643">600</td> </tr> <tr> <td data-bbox="415 643 625 670">POS System</td> <td data-bbox="688 643 898 670">1000</td> <td data-bbox="898 643 1108 670">225</td> <td data-bbox="1108 643 1806 670">1225</td> </tr> <tr> <td data-bbox="415 670 625 698">Program Project Sizing Effort</td> <td data-bbox="688 670 898 698"></td> <td data-bbox="898 670 1108 698">83</td> <td data-bbox="1108 670 1806 698">83</td> </tr> <tr> <td data-bbox="415 730 625 758">Totals</td> <td data-bbox="688 730 898 758">4,909</td> <td data-bbox="898 730 1108 758">1,009</td> <td data-bbox="1108 730 1806 758"><u>5,918</u></td> </tr> </tbody> </table> <p>* During this sizing effort it was determined that 1 POS PC was not included in the Technology Plan costs. As a result the cost of a PC and</p>	INITIATIVE	PLAN ESTIMATE	CONTINGENCY	TOTAL (includes core, PM, Scope and Contingency for each initiative)	Asset Theme Data	2049	201	2250	Network Connectivity	1660	100	1760	Hardware Refresh	200	400	600	POS System	1000	225	1225	Program Project Sizing Effort		83	83	Totals	4,909	1,009	<u>5,918</u>
INITIATIVE	PLAN ESTIMATE	CONTINGENCY	TOTAL (includes core, PM, Scope and Contingency for each initiative)																										
Asset Theme Data	2049	201	2250																										
Network Connectivity	1660	100	1760																										
Hardware Refresh	200	400	600																										
POS System	1000	225	1225																										
Program Project Sizing Effort		83	83																										
Totals	4,909	1,009	<u>5,918</u>																										
17-Oct-08																													
	<p>Hour Allocation by Team and Initiative:</p> <table border="1"> <thead> <tr> <th data-bbox="415 979 625 1006">Initiative</th> <th data-bbox="625 979 793 1006">App Services</th> <th data-bbox="793 979 1024 1006">Tech Services</th> <th data-bbox="1024 979 1806 1006">Tech Services - DBA</th> </tr> </thead> <tbody> <tr> <td data-bbox="415 1006 625 1034">Data Theme</td> <td data-bbox="625 1006 793 1034">2250</td> <td data-bbox="793 1006 1024 1034">0</td> <td data-bbox="1024 1006 1806 1034">0</td> </tr> <tr> <td data-bbox="415 1034 625 1062">Networking</td> <td data-bbox="625 1034 793 1062">760</td> <td data-bbox="793 1034 1024 1062">1000</td> <td data-bbox="1024 1034 1806 1062">0</td> </tr> <tr> <td data-bbox="415 1062 625 1089">Hardware Refresh</td> <td data-bbox="625 1062 793 1089">400</td> <td data-bbox="793 1062 1024 1089">200</td> <td data-bbox="1024 1062 1806 1089">0</td> </tr> <tr> <td data-bbox="415 1089 625 1117">POS</td> <td data-bbox="625 1089 793 1117">1115</td> <td data-bbox="793 1089 1024 1117">60</td> <td data-bbox="1024 1089 1806 1117">50</td> </tr> <tr> <td data-bbox="415 1117 625 1144">Program Sizing</td> <td data-bbox="625 1117 793 1144">83</td> <td data-bbox="793 1117 1024 1144"></td> <td data-bbox="1024 1117 1806 1144"></td> </tr> <tr> <td data-bbox="415 1177 625 1205">Totals</td> <td data-bbox="625 1177 793 1205">4,608</td> <td data-bbox="793 1177 1024 1205">1,260</td> <td data-bbox="1024 1177 1806 1205">50</td> </tr> </tbody> </table>	Initiative	App Services	Tech Services	Tech Services - DBA	Data Theme	2250	0	0	Networking	760	1000	0	Hardware Refresh	400	200	0	POS	1115	60	50	Program Sizing	83			Totals	4,608	1,260	50
Initiative	App Services	Tech Services	Tech Services - DBA																										
Data Theme	2250	0	0																										
Networking	760	1000	0																										
Hardware Refresh	400	200	0																										
POS	1115	60	50																										
Program Sizing	83																												
Totals	4,608	1,260	50																										
17-Oct-08																													

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Return on Investment Analysis

Assumptions

Date	Assumption Description
Asset Theme Data Development Assumptions	
Explanation of Technology Plan Asset Theme Data Development Labor Estimate -	
17-Oct-08	<p>The work includes the completion of the analysis, modeling, and creation of an ArcGIS geodatabase that will contain P & R's built infrastructure. The P & R Staff will maintain the geodatabase.</p> <p>Total Hours Allocation: App Services - 2250 Tech Services - 0 Tech Services DBA - 0</p>
17-Oct-08	Utilize existing hardware for all environments necessary for this initiative.
17-Oct-08	P & R is currently billed \$5,448 per quarter for 2 ArcGIS licenses. The annual fee for the licenses is estimated at \$21,792.
Network Connectivity Cost Assumptions	
Explanation of Technology Plan Network Connectivity Labor Estimate -	
17-Oct-08	<p>In the Technology Plan, labor was detailed for the connection of 7 primary sites (1 via fiber and 6 via T1) and the design of the connectivity of the 18 secondary sites.</p> <ul style="list-style-type: none"> * Each T1 connection is estimated at 30 hours. Totaling 180 hours * The fiber connection is estimated at 10 hours. * The initial assessment and high level design of the secondary 18 sites was estimated at 15 hours per site (5 hours per site, per person, with 1 App Services and 2 Tech Services staff members). Totaling 270 hours. * The detailed design and connectivity of the 18 secondary sites has a budget of \$404,446 in the Technology Plan. The percentage of labor on the installation of a T1 line is 38%. To determine an approximate labor estimate of the secondary sites, 38% of \$404,446 is was converted (156,689.48) into hours (1260) and then rounded to 1200 hours. <p>The sum of the labor hours for the T1 installations, fiber installation, secondary site initial assessment and connectivity is 1660 hours. By ac</p> <p>Total Hours Allocation: App Services - 760 Tech Services - 1000 Tech Services DBA - 0</p>

Oakland County -- P R Technology Implementation Program - Yr1

Return on Investment Analysis

Assumptions

Date	Assumption Description
17-Oct-08	The Network Team capital costs for a T1 connection is \$5,801.
17-Oct-08	The Network Team capital costs for a fiber connection is \$4,628.
17-Oct-08	As mentioned in the Labor assumptions, the detailed design and connectivity of 18 secondary sites has a budget of \$404,446 in the Technology Plan and 1,200 hours (\$146,400) were put to Labor. The remaining budget of \$258,046 plus \$30 (due to rounding) is the amount in the Networking - Other - Implement Remaining Sites (\$258,076).
17-Oct-08	The Network - Maintenance cost is for 9 sites (6 new T1s and 3 existing T1s). The monthly maintenance cost for a T1 line is \$250. The annual maintenance calculates to \$27,000.
Hardware Refresh Cost Assumptions	
Explanation of Technology Plan Hardware Refresh Labor Estimate -	
17-Oct-08	<p>P & R has approximately 50 PCs and it is estimated that the amount could double to 100. It was estimated it could take 2 hours to configure and deploy each PC.</p> <p>Total Hours Allocation: App Services - 400 Tech Services - 200 Tech Services DBA - 0</p>
17-Oct-08	P & R approved \$250K to install personal computing devices. IT labor was estimated at 200 hours, leaving \$225,600 for hardware acquisition.
17-Oct-08	The annual PC System, Notebooks, Printers - Maintenance cost (\$289,720) was calculated by multiplying the current quarterly P & R hardware maintenance cost by 4, then multiplying the total by 2 since P & R will have approximately twice as many PCs than they currently do.
Point of Sales System Cost Assumptions	
Explanation of Technology Plan Point of Sale Labor Estimate -	
17-Oct-08	<p>Estimate includes server configuration, vendor management and PeopleSoft integration.</p> <p>Total Hours Allocation: App Services - 1115 Tech Services - 60 Tech Services DBA - 50</p>
17-Oct-08	P & R decided to retain the Active suite of software, however it will be reconfigured as a centralized system.
17-Oct-08	The POS vendor will provide professional services and support during the implementation for \$15,600 (Contractor Professional Services for Active POS System). Quote from vendor (Active Communities).
17-Oct-08	Package Software - Acquisition (POS System) - This cost includes the POS software. Quote from vendor.

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Return on Investment Analysis

Assumptions

Date	Assumption Description
17-Oct-08	Package Software - Acquisition (3rd party hardware and software procured by Active)- This cost includes the 3rd party hardware and software that will be procured by the vendor. Quote from vendor.
17-Oct-08	Package Software - Maintenance (POS System) - This cost (\$21,875) is for vendor support of the POS system. Quote from vendor.
17-Oct-08	There will be 2 central servers (including QA) and 1 high performing PCs at each primary POS site (10). Assuming dual processor on each device therefore 24 SQL licenses will be required.
17-Oct-08	It is estimated that it will take the Work Station Services Team 20 hours to deploy the PCs at the primary POS sites.
17-Oct-08	It is estimated that it will take the Server Team 20 hours to procure and set up each server.
21-Oct-08	It is estimated that it will take the DBAs 50 hours to install SQL on the servers and create the databases.
17-Oct-08	The System Maintenance, Customer Support and Planned Maintenance hours are for the Point of Sale System.