

Oakland County Department of Information Technology Project Scope and Approach

Project Name: Network Availability and Usage Trend Analysis Project ID: TP7186NA

Leadership Group: Information Technology Steering Committee			
Department: Information Technology		Division: Technical Systems and Networking	
Project Sponsor: David Veit	Date Requested: 8/31/06	PM Customer No. 186	
Request Type:	<u>New Development</u>	<i>Enhancement</i>	<i>Customer Support</i>
<i>Planned System Maintenance or Upgrade</i>			
IT Team Name: Network Services		IT Team No: P	
Project Manager/Leader:			
Account Number: 17030	Account Description: Technical Systems and Networking	Customer Name:	Information Technology
Grant Funded? Yes <input checked="" type="checkbox"/> No	Mandate? Yes <input checked="" type="checkbox"/> No	Mandate Source:	

Project Goal

To evaluate and implement a tool set to monitor, collect, and report network availability and usage statistics, so that Technical Systems and Networking can identify where resources and upgrades would be most beneficial thereby controlling network costs.

Business Objective

To perform project management activities, so that project execution is timely with appropriate quality and cost controls.

Major Deliverables

This Business Objective's deliverables are organized into one project phase: Project Management.

Project Management Phase:

- Updated Project Plan
- Project Issues Log
- Project Scope Log

Approach

To utilize Technical Systems and Networking staff to perform the following activities:

- Develop Initial Project Documents, and
- Develop and Maintain Project Data.

IT management will provide expertise and approval of project documentation requiring management approval.

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Business Objective

To evaluate and implement a tool set to monitor, collect, and report network availability and usage statistics, so that Technical Systems and Networking can identify where resources and upgrades would be most beneficial thereby controlling network costs.

Major Deliverables

1. Pre-Screen Two Product Types

Perform product and vendor research, including demonstration(s) for two product types: 1) Event Correlation, and 2) Network Statistics.

2. Product(s) and Services Purchased

Perform standard County purchasing activities to obtain and track hardware, software and services (design, install, education and transition) purchases using the RFP Process.

3. Architecture Diagrams

Working with the contracted service providers, develop a diagram for each project that illustrates its placement and usage within the County Network Architecture.

4. Standard Operating Procedures (2 SOPs)

Management approved documentation formalizing the usage of the tools.

5. Production Implementation

Working with the contracted service providers, install the hardware and software purchased in the Production Environment.

6. Technical Knowledge Transfer

Working with the contracted service providers, conduct product education and transition support to the Network Services Team.

7. Report Matrix Document

Develop a matrix document that lists the reports and their usage/review timeframe within the County. Develop an additional document section to describe the reports and/or reporting features, if necessary.

Approach

To utilize internal Technical Systems and Networking staff supplemented by contracted services to provide project deliverables.

Engage two product suppliers to provide, at minimum, software, along with design, installation, education and transition services; hardware is optional.

IT management will provide expertise and approval of plans and project documentation requiring management approval as needed.

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

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Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users 7

Divisions Technical Systems and Networking

Leadership Groups Information Technology Steering

Risk

Business Environment **Low** little or no impact to existing business processes.

Technical Environment **Medium** previously implemented technologies with new aspects and/or new requirements.

Assumptions

Staffing IT Staffing: resources will be available for the hours indicated per the attached project plan.

Other Staffing: additional staffing will be available as follows:

<u>Role:</u>	<u>Name</u>	<u>Hours per Day</u>
Project Sponsor:		

Facilities

- All work will be performed in Bldg 49

**Oakland County
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Technical

- Two application purchases, one for network statistics and one for event correlation.

Funding

- IT

Other

- The two applications will come from separate suppliers.

Priority

Constraints

- None identified.

Exclusions

- None identified.

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PROJECT PHASE AUTHORIZATION

Phase(s): All	
Total Estimated Application Services	Hours: Cost:
Total Estimated Technical Systems	Hours: 576 Cost: \$22,448
Total Estimated eGovernment Services	Hours: Cost:
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 eGovernment Services 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: 576	Cost: \$22,448
Preliminary Estimated Development for Future Phases	Hours:	Cost:
Grand Total Estimated Development	Hours: 576	Cost: \$22,448

Oakland County Department of Information Technology Project Scope and Approach

Project Name: Network Availability and Usage Trend Analysis Project ID: TP7186NA

PROJECT COMPLETION AUTHORIZATION

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

Open Workbench - [Network Availability and Usage Trend Analysis (667) - Size Estimate (+/- 10% to 50%)]

File Edit View Tools Window Help

[All Resources]

Type	ID	Task Name	Estimated Hours	Estimated Cost	Estimate Notes
Phase	000000	PROJECT MANAGEMENT	124	\$15,128.00	
Phase	100000	SOLUTION DEVELOPMENT	174	\$1,830.00	
Phase	200000	PRE-IMPLEMENTATION	128	\$1,830.00	
Phase	300000	IMPLEMENTATION	95	\$1,830.00	
Phase	400000	POST IMPLEMENTATION	55	\$1,830.00	
			576	\$22,448.00	

Favorites
 Annual Replanning
 Size Estimates
 Size Estimate - Scope Change Management
 Size Estimates - Tech/DBA/WS Resource Hours/\$
 Size Estimate (+/- 10% to 50%)

TP7186NA - Network Availability and Usage Trend Analysis (667)

3.1 - Provide an Enhanced Application Service Offering

- 3.1.1 - Increase application integration through web services
- 3.1.2 - Research and develop a Constituent Relationship Management (CRM) strategy
- 3.1.3 - Promote mobility and location integration in business applications
- 3.1.4 - Utilize ecommerce platform to offset costs and expand product offerings to customers
- 3.1.5 - Improve the quality, reliability and availability of all applications
- 3.1.6 - Increase the agility and responsiveness of business units by expanding customer analytics
- 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
- 3.1.8 - Centralize identity and access management for all applications and content

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
- 3.2.2 - Implement the IT Infrastructure Library (ITIL) best practice framework for IT Service Management
- 3.2.3 - Define a service and support strategy that clearly identifies the IT service provided
- 3.2.4 - Provide a high-quality training program to empower employees through technology
- 3.2.5 - Develop a formalized customer communication plan
- 3.2.6 - Build IT Staff expertise through professional development
- 3.2.7 - Expand capacity through ongoing organizational review and selective outsourcing

3.3 - Implement a Standardized Infrastructure Strategy

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

Oakland County -- Network Availability and Usage Trend Analysis

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:	205,200	5,200	11,200	5,200	35,200	5,200	267,200
Costs:							
Development Services Subtotal:	71,760	6,496	6,496	6,496	6,496	6,496	104,240
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	63,570	13,166	13,166	13,166	13,166	13,166	129,400
Infrastructure Subtotal:	18,000	2,506	2,506	2,506	2,506	2,506	30,530
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
Annual Statistics:							
Annual Total Savings	205,200	5,200	11,200	5,200	35,200	5,200	267,200
Annual Total Costs	153,330	22,168	22,168	22,168	22,168	22,168	264,170
Annual Return on Investment	51,870	(16,968)	(10,968)	(16,968)	13,032	(16,968)	3,030
Annual Costs/Savings Ratio	74.72%	426.31%	197.93%	426.31%	62.98%	426.31%	
Project Cumulative Statistics:							
Cumulative Total Savings	205,200	210,400	221,600	226,800	262,000	267,200	267,200
Cumulative Total Costs	153,330	175,498	197,666	219,834	242,002	264,170	264,170
Cumulative Return on Investment	51,870	34,902	23,934	6,966	19,998	3,030	3,030
Cumulative Cost/Savings Ratio	74.72%	83.41%	89.20%	96.93%	92.37%	98.87%	98.87%
Year Positive Payback Achieved	Year 1						Year 1
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 -- Network Availability and Usage Trend Analysis

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
Improved prioritization of network services resources by providing accurate capacity and performance statistics. - Cost Saving of \$30000 per year extending service life of Core Switching Equipment	Cost Avoidance	IT - Information Technology / 17030		1	30,000	30,000	
Improved prioritization of network services resources by providing accurate capacity and performance statistics. - Cost Saving of \$6000 per year extending service life of Security Equipment	Cost Avoidance	IT - Information Technology / 17030		1	6,000	6,000	
Reduced Integration hardware cost - Cost Saving of \$2000 per Edge switching devices due to reduction in number of switches required per platform	Cost Avoidance	IT - Information Technology / 17030		100	2,000	200,000	
Improved network uptime by proactively identifying capacity and/or connection reliability related issues.-Reduced County Staff downtime due to configuration change based outages (network).	Cost Avoidance	IT - Information Technology / 17030	HR	200	26	5,200	
Improved network engineering efficiency through statistical and capacity analysis to avoid overbuilding network infrastructure	Cost Avoidance	IT - Information Technology / 17030				0	
						0	
						0	

Oakland County -- Network Availability and Usage Trend Analysis

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		
Improved prioritization of network services resources by providing accurate capacity and performance statistics. - Cost Saving of \$30000 per year extending service life of Core Switching Equipment	Cost Avoidance					x								30,000.00	
Improved prioritization of network services resources by providing accurate capacity and performance statistics. - Cost Saving of \$6000 per year extending service life of Security Equipment	Cost Avoidance			x						6,000.00					
Reduced Integration hardware cost - Cost Saving of \$2000 per Edge switching devices due to reduction in number of switches required per platform	Cost Avoidance	x						200,000.00							
Improved network uptime by proactively identifying capacity and/or connection reliability related issues.-Reduced County Staff downtime due to configuration change based outages (network).	Cost Avoidance	x	x	x	x	x	x	5,200.00	5,200.00	5,200.00	5,200.00	5,200.00	5,200.00	5,200.00	5,200.00
Improved network engineering efficiency through statistical and capacity analysis to avoid overbuilding network infrastructure	Cost Avoidance														

Oakland County -- Network Availability and Usage Trend Analysis
Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Improved network engineering efficiency through statistical and capacity analysis to avoid overbuilding network infrastructure							
<i>Cost Avoidance Subtotal:</i>	205,200	5,200	11,200	5,200	35,200	5,200	267,200
Savings Total:	205,200	5,200	11,200	5,200	35,200	5,200	267,200

Oakland County -- Network Availability and Usage Trend Analysis
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	IT - Information Technology / 17030		576	89	51,264		x							
IT Hours - System Maintenance	Development Svcs	IT - Information Technology / 17030	ANN	4	56	224		x	x	x	x	x	x	x	
IT Hours - Customer Support	Development Svcs	IT - Information Technology / 17030	ANN	104	56	5,824		x	x	x	x	x	x	x	
IT Hours - Planned Maintenance	Development Svcs	IT - Information Technology / 17030	ANN	8	56	448		x	x	x	x	x	x	x	
Contractor Professional Services	Development Svcs	IT - Information Technology / 17030		80	175	14,000		x							
PC System - Acquisition	Hardware					0									
PC System - Maintenance	Hardware				2,304	0									
Notebook - Acquisition	Hardware					0									
Notebook - Maintenance	Hardware				2,372	0									
Mini Notebook - Acquisition	Hardware					0									
Mini Notebook - Maintenance	Hardware				2,196	0									
Laserprinter 1 - Acquisition	Hardware					0									
Laserprinter 1 - Maintenance	Hardware				1,104	0									
Laserprinter 2 - Acquisition	Hardware					0									
Laserprinter 2 - Maintenance	Hardware				1,208	0									
Laserprinter 3 - Acquisition	Hardware					0									
Laserprinter 3 - Maintenance	Hardware				1,860	0									
Image Workstations - Acquisition	Hardware					0									
Image Workstations - Maintenance	Hardware				3,496	0									
Terminals - Acquisition	Hardware					0									
Terminals - Maintenance	Hardware				644	0									
PRTR w/TERM ID - Acquisition	Hardware					0									
PRTR w/TERM ID - Maintenance	Hardware				1,072	0									
PRTR w/o TERM ID - Acquisition	Hardware					0									
PRTR w/o TERM ID - Maintenance	Hardware				1,072	0									
PC Maintenance User Owned	Hardware				2,304	0									
Printer Maintenance User Owned	Hardware				1,072	0									
McAfee Anti-virus Software - Acquisition	Software	IT - Information Technology / 17030		2	35	70		x							
OS - Acquisition	Software	IT - Information Technology / 17030		2	500	1,000		x							
Server OS Sftwre - Maintenance	Software	IT - Information Technology / 17030		2	333	666			x	x	x	x	x	x	
Network Statistics Package - Purchase	Software	IT - Information Technology / 17030		1	50,000	50,000		x							
Network Statistics Package-Maintenance	Software	IT - Information Technology / 17030		1	12,500	12,500		x	x	x	x	x	x	x	

Oakland County -- Network Availability and Usage Trend Analysis
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	
Event Correlation Package - Purchase	Software	IT - Information Technology / 17030		0	70,000	0		x						
Event Correlation Package - Maintenance	Software	IT - Information Technology / 17030		0	17,500	0		x	x	x	x	x	x	x
Rack Mount and Server	Infrastructure	IT - Information Technology / 17030		2	9,000	18,000		x						
Server - Hardware Maintenance	Infrastructure	IT - Information Technology / 17030		2	1,253	2,506			x	x	x	x	x	x
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								
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 -- Network Availability and Usage Trend Analysis

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	51,264.00					
IT Hours - System Maintenance	Development Svcs	224.00	224.00	224.00	224.00	224.00	224.00
IT Hours - Customer Support	Development Svcs	5,824.00	5,824.00	5,824.00	5,824.00	5,824.00	5,824.00
IT Hours - Planned Maintenance	Development Svcs	448.00	448.00	448.00	448.00	448.00	448.00
Contractor Professional Services	Development Svcs	14,000.00					
PC System - Acquisition	Hardware						
PC System - Maintenance	Hardware						
Notebook - Acquisition	Hardware						
Notebook - Maintenance	Hardware						
Mini Notebook - Acquisition	Hardware						
Mini Notebook - Maintenance	Hardware						
Laserprinter 1 - Acquisition	Hardware						
Laserprinter 1 - Maintenance	Hardware						
Laserprinter 2 - Acquisition	Hardware						
Laserprinter 2 - Maintenance	Hardware						
Laserprinter 3 - Acquisition	Hardware						
Laserprinter 3 - Maintenance	Hardware						
Image Workstations - Acquisition	Hardware						
Image Workstations - Maintenance	Hardware						
Terminals - Acquisition	Hardware						
Terminals - Maintenance	Hardware						
PRTR w/TERM ID - Acquisition	Hardware						
PRTR w/TERM ID - Maintenance	Hardware						
PRTR w/o TERM ID - Acquisition	Hardware						
PRTR w/o TERM ID - Maintenance	Hardware						
PC Maintenance User Owned	Hardware						
Printer Maintenance User Owned	Hardware						
McAfee Anti-virus Software - Acquisition	Software	70.00					
OS - Acquisition	Software	1,000.00					
Server OS Sftwre - Maintenance	Software		666.00	666.00	666.00	666.00	666.00
Network Statistics Package - Purchase	Software	50,000.00					
Network Statistics Package-Maintenance	Software	12,500.00	12,500.00	12,500.00	12,500.00	12,500.00	12,500.00

Oakland County -- Network Availability and Usage Trend Analysis
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Event Correlation Package - Purchase	Software	0.00					
Event Correlation Package - Maintenance	Software	0.00	0.00	0.00	0.00	0.00	0.00
Rack Mount and Server	Infrastructure	18,000.00					
Server - Hardware Maintenance	Infrastructure		2,506.00	2,506.00	2,506.00	2,506.00	2,506.00
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						
TBD	Infrastructure						
TBD	Infrastructure						
TBD	Infrastructure						
TBD	Infrastructure						
Internet Access	Infrastructure						
Project Staff Training	Training						
User Training	Training						

Oakland County -- Network Availability and Usage Trend Analysis

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	51,264						51,264
IT Hours - System Maintenance	224	224	224	224	224	224	1,344
IT Hours - Customer Support	5,824	5,824	5,824	5,824	5,824	5,824	34,944
IT Hours - Planned Maintenance	448	448	448	448	448	448	2,688
Contractor Professional Services	14,000						14,000
PC System - Acquisition							
PC System - Maintenance							
<i>Development Services Subtotal:</i>	71,760	6,496	6,496	6,496	6,496	6,496	104,240
Hardware:							
<i>Hardware Subtotal:</i>							
Software:							
McAfee Anti-virus Software - Acquisition	70						70
OS - Acquisition	1,000						1,000
Server OS Sftwre - Maintenance		666	666	666	666	666	3,330
Network Statistics Package - Purchase	50,000						50,000
Network Statistics Package-Maintenance	12,500	12,500	12,500	12,500	12,500	12,500	75,000
Event Correlation Package - Purchase	0						
Event Correlation Package - Maintenance	0	0	0	0	0	0	
<i>Software Subtotal:</i>	63,570	13,166	13,166	13,166	13,166	13,166	129,400
Infrastructure:							
Server - Hardware Maintenance	18,000						18,000
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond		2,506	2,506	2,506	2,506	2,506	12,530
<i>Infrastructure Subtotal</i>	18,000	2,506	2,506	2,506	2,506	2,506	30,530
Training:							
<i>Training Subtotal:</i>							
Other:							
<i>Other Subtotal:</i>							
Costs Total:	153,330	22,168	22,168	22,168	22,168	22,168	264,170

