

Oakland County Department of Information Technology Project Scope and Approach

Project Name: Internal 802.11g Services

Project ID: TP7186GS

Leadership Group: Information Technology			
Department: Information Technology		Division: Technical Systems and Networking	
Project Sponsor: David Veit	Date Requested: 6/29/06	PM Customer No. 186	
Request Type:	<input checked="" type="checkbox"/> New Development	<input type="checkbox"/> Enhancement	<input type="checkbox"/> Customer Support
<i>Planned System Maintenance or Upgrade</i>			
IT Team Name: Network Services		IT Team No: P	
Project Manager/Leader: David Bates			
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 provide secure 802.11b/g/n access to the private internal County network for use by County issued laptops, tablets, etc. in mobile computing platform dense County sites, and as a result extend the coverage area for the public to access the Campus Wireless (public) network, so that mobile users experience a productivity increase through continuous network connectivity.

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 Management 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 provide secure 802.11b/g/n access to the private internal County network for use by County issued laptops, tablets, etc. at major County sites, so that mobile County users experience a productivity increase through continuous network connectivity.

Major Deliverables

1. Requirements Document

Develop a document that describes the locations for installation, along with other technical and project needs.

2. Request for Proposal (RFP)

Following the County's standard process, develop a RFP for equipment and services (planning, installation and training).

3. Vendor Selection

Following the County's process, select and engage a vendor for equipment and services.

4. Technical Design, Capacity and Coverage Map / Document

Work with the vendor to develop management approved technical documentation necessary to ensure project goals and objectives are met.

5. Facilities Work Orders

Technical Systems and Networking staff will develop and follow-up on the work orders submitted to Facilities.

6. End-User Communications Plan / Materials

Technical Systems and Networking staff will develop a plan and e-mail communication message templates to communicate with and educate end-users.

7. Pilot Implementation

Work with the vendor to plan, install, configure, test and support equipment in a Pilot environment to quality assure the solution.

8. Service Definition Document

Technical Systems and Networking staff will produce an IT Steering Committee approved document that describes the services provided, including: In-Scope and Out-of-Scope Functions, Hours of Operation, Escalation Procedure, etc.

9. Policies, Standard Operating Procedure(s) (SOPs)

With vendor assistance as needed, Technical Systems and Networking staff will produce multiple management approved documents formalizing County policies, service monitoring and incident handling.

10. Vendor Provided Technical Training

Vendor to provide the Network Services team with: Technology, design, installation,

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maintenance, monitoring, management, and troubleshooting training.

11. In-House Technical Training / Service Desk Support Transition

With vendor assistance as needed, Technical Systems and Networking staff will develop and execute training sessions to enable Technical Systems and Networking, along with Service Desk team members to perform their duties using the new tools, policies, and SOPs.

12. Full Implementation

Work with the vendor to install and configure equipment in Production Environment, and provide post implementation support.

Approach

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

Select a vendor to provide technical services and equipment in a fixed price contractual agreement to include the following project deliverables:

- Technical Design, Capacity and Coverage Map / Document
- Pilot Implementation
- Vendor Provided Technical Training
- Assistance with Policy and SOP development
- Assistance with In-House Training Documentation development
- Full Implementation

To utilize FM&O to provide electrical power and facilities related equipment installation services.

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

Benefits

See Return on Investment (ROI) Analysis Document

Benefits

See Return on Investment (ROI) Analysis Document

Intangible

Improved Service

- Extended Campus Wireless availability / coverage for public Internet users.
- Access to County applications and data for County issued wireless computing devices (notebook and tablet PCs).

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Product/Service Accuracy

- None identified.

Product/Service Productivity

- Faster access to County data and applications for County wireless computing device users.

Impact

Number of Users **TBD**

Divisions **All**

Leadership Groups **All**

Risk

Business Environment Low - little or no impact to existing business processes

Technical Environment High - new or non-standard technology

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:

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Facilities

- None identified.

Technical

- Vendor will provide design/engineering services including a recommendation to merge existing Campus Wireless solution into this project's solution.
- Vendor to provide basic monitoring, management and troubleshooting tools/procedures.
- Workforce identification/study to understand where we need coverage (density of users study).
- Support for b/g/n only; No 802.11a support.
- Internet access through DMZ for County users; same as a direct network connected device.
- Solution must include encryption.
- Solution is replaced in the fourth year (see ROI).

Funding

- Information Technology

Other

- Contractual agreement with vendor will include equipment and a management system.
- Project estimate is based on installing 150 wireless access points.

Priority **TBD**

Constraints

-

Exclusions

- No VoIP.
- Sites with low density of mobile users may be excluded.
- Support for b/g/n only; No 802.11a support.
- Upgrades to backhaul connections.

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PROJECT PHASE AUTHORIZATION

Phase(s): All	
Total Estimated Application Services	Hours: 8 Cost: \$712
Total Estimated Technical Systems	Hours: 1,966 Cost: \$84,098
Total Estimated eGovernment Services	Hours: Cost:
Total Estimated CLEMIS	Hours: 8 Cost: \$712
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: 1,982 Cost: \$85,522
Preliminary Estimated Development for Future Phases	Hours: Cost:
Grand Total Estimated Development	Hours: 1,982 Cost: \$85,522

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PROJECT COMPLETION AUTHORIZATION

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

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Internal 802.11g Services - Size Estimate (+/- 10% to 50%) (Read-Only)]					
Type	ID	Task Name	Estimated Hours	Estimated Cost	Estimate Notes
Phase	000000	PROJECT MANAGEMENT	461	\$56,241.99	
Phase	100000	SOLUTION DEVELOPMENT	492	\$8,051.98	
Phase	200000	PRE-IMPLEMENTATION	355	\$6,100.00	
Phase	300000	IMPLEMENTATION	600	\$12,200.00	
Phase	400000	POST IMPLEMENTATION	74	\$2,928.00	
			1,982	\$85,521.97	

TP7186GS - Internal 802.11g Services

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 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 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 checked="" 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"/> | |

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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:	258,838	27,440	27,440	258,838	27,440	27,440	627,436
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	0	0	0	0	0	0	0
Infrastructure Subtotal:	375,000	0	0	375,000	0	0	750,000
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	633,838	27,440	27,440	633,838	27,440	27,440	1,377,436
Annual Return on Investment	(633,838)	(27,440)	(27,440)	(633,838)	(27,440)	(27,440)	(1,377,436)
Annual Costs/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Project Cumulative Statistics:							
Cumulative Total Savings	0	0	0	0	0	0	0
Cumulative Total Costs	633,838	661,278	688,718	1,322,556	1,349,996	1,377,436	1,377,436
Cumulative Return on Investment	(633,838)	(661,278)	(688,718)	(1,322,556)	(1,349,996)	(1,377,436)	(1,377,436)
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: _____						
Costs (including IT Resources) Reviewed By Technical Services Manager	Date: _____						

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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		
IT Hours - New Development	Development Svcs	IT - Information Technology / 17030	HR	1,982	89	176,398		x				x			
IT Hours - System Maintenance	Development Svcs	IT - Information Technology / 17030	ANN	490	56	27,440		x	x	x	x	x	x	x	
IT Hours - Customer Support	Development Svcs				122	0									
IT Hours - Planned Maintenance	Development Svcs				122	0									
User Hours - New Development	Development Svcs					0									
User Hours - PTNE/OT	Development Svcs					0									
Contractor Professional Services - Fix bid for design, install, training services	Development Svcs	IT - Information Technology / 17030	EA	1	55,000	55,000		x				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									
Package Software - Acquisition	Software					0									
Package Software - Maintenance	Software					0									
Business Objects Access	Software					0									
Term Emulation SFTW-Acquisition	Software					0									
Term Emulation SFTW-Maintenance	Software					0									
Server - Acquisition/Upgrade	Infrastructure				8,000	0									
Server - Maintenance	Infrastructure				360	0									
Server Sftwre - Acquisition/Upgrade	Infrastructure				335	0									
Server Sftwre - Maintenance	Infrastructure					0									
Server Rack Mount	Infrastructure				400	0									
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure				21,372	0									
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure				3,432	0									

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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		
MS SQL Server Standard Per Processor - Includes Year 1 Maintenance	Infrastructure				4,725	0									
Cisco WCS Server - Server - Acquisition/Upgrade	Infrastructure		EA	1	5,500	5,500									
Server - Maintenance	Infrastructure		ANN	1	1,650	1,650									
Server Sftwre - Acquisition/Upgrade	Infrastructure		EA	1	3,500	3,500									
Server Sftwre - Maintenance	Infrastructure		ANN	1	1,050	1,050									
Wireless Access Points	Infrastructure	IT - Information Technology / 17034	EA	150	2,500	375,000		x				x			
Wireless Access Points - Growth	Infrastructure		EA	0	700	0									
Wireless Access Points - Hot Swap	Infrastructure		EA	4	700	2,800									
WAP Mainteance	Infrastructure		ANN	1	75,000	75,000									
Facilities - Network Drops	Infrastructure		EA	300	350	105,000									
Facilities - Power Outlets and Equipment Mounting	Infrastructure		EA	300	400	120,000									
TBD	Infrastructure					0									
TBD	Infrastructure					0									
Internet Access	Infrastructure				180	0									
Project Staff Training	Training					0									
User Training	Training					0									

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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs	176,398.00			176,398.00		
IT Hours - System Maintenance	Development Svcs	27,440.00	27,440.00	27,440.00	27,440.00	27,440.00	27,440.00
IT Hours - Customer Support	Development Svcs						
IT Hours - Planned Maintenance	Development Svcs						
User Hours - New Development	Development Svcs						
User Hours - PTNE/OT	Development Svcs						
Contractor Professional Services - Fix bid for design, install, training services	Development Svcs	55,000.00			55,000.00		
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						
Package Software - Acquisition	Software						
Package Software - Maintenance	Software						
Business Objects Access	Software						
Term Emulation SFTW-Acquisition	Software						
Term Emulation SFTW-Maintenance	Software						
Server - Acquisition/Upgrade	Infrastructure						
Server - Maintenance	Infrastructure						
Server Sftwre - Acquisition/Upgrade	Infrastructure						
Server Sftwre - Maintenance	Infrastructure						
Server Rack Mount	Infrastructure						
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure						
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure						

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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
MS SQL Server Standard Per Processor - Includes Year 1 Maintenance	Infrastructure						
Cisco WCS Server - Server - Acquisition/Upgrade	Infrastructure						
Server - Maintenance	Infrastructure						
Server Sftwre - Acquisition/Upgrade	Infrastructure						
Server Sftwre - Maintenance	Infrastructure						
Wireless Access Points	Infrastructure	375,000.00			375,000.00		
Wireless Access Points - Growth	Infrastructure						
Wireless Access Points - Hot Swap	Infrastructure						
WAP Mainteance	Infrastructure						
Facilities - Network Drops	Infrastructure						
Facilities - Power Outlets and Equipment Mounting	Infrastructure						
TBD	Infrastructure						
TBD	Infrastructure						
Internet Access	Infrastructure						
Project Staff Training	Training						
User Training	Training						

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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	176,398			176,398			352,796
IT Hours - System Maintenance	27,440	27,440	27,440	27,440	27,440	27,440	164,640
IT Hours - Customer Support							
IT Hours - Planned Maintenance							
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services - Fix bid for design, install, training services	55,000			55,000			110,000
<i>Development Services Subtotal:</i>	258,838	27,440	27,440	258,838	27,440	27,440	627,436
Hardware:							
<i>Hardware Subtotal:</i>							
Software:							
<i>Software Subtotal:</i>							
Infrastructure:							
Wireless Access Points	375,000			375,000			750,000
<i>Infrastructure Subtotal</i>	375,000			375,000			750,000
Training:							
<i>Training Subtotal:</i>							
Other:							
<i>Other Subtotal:</i>							
Costs Total:	633,838	27,440	27,440	633,838	27,440	27,440	1,377,436

