

Oakland County Department of Information Technology Project Scope and Approach

Project Name: Implement a Cash Register Monitoring System

Project ID: DA8112CA

Leadership Group: Finance / Admin			
Department: County Executive		Division: Auditing	
Project Sponsor: Pam Weipert	Date Requested: 10/23/07	PM Customer No. 112	
Request Type:	<u>New Development</u>	<i>Enhancement</i>	<i>Customer Support</i>
	<i>Planned System Maintenance or Upgrade</i>		
IT Team Name: Finance/Admin		IT Team No: A	
Project Manager/Leader: Chithra Chakrapani			
Account Number: 44034	Account Description: Auditing New Development	Customer Name:	Auditing Division
Grant Funded? Yes <u>No</u>	Mandate? Yes <u>No</u>	Mandate Source:	

Project Goal

To incorporate new features to the Cash register System so that Auditing Division will have access to backup copies of the electronic journal file for the cash registers provided by the Great Lakes Data Systems (GLDS), ability to view multiple journal files from Auditing Division computers, and access to reports that summarize cashier activity.

Business Objective

To create an environment that allows scheduled imports of electronic journal files by the Auditing Division to a CD. (Estimated time for GLDS to complete is 8 hours)

Major Deliverables

- A directory in the central FTP server at IT for receipt of electronic files.
- Enhancement to the Cash Register software (Great Lakes Data Systems (GLDS) to recode Cash register to create the journal files.)
- A process to deliver journal files to FTP server is set up GLDS.
- A process to download the files to a CD is set up by GLDS.
- Disaster recovery documentation is prepared and delivered by GLDS.

Approach

- Work with technical Services to establish a directory on the FTP Server to move data.
- Work with Great lakes Data System and Auditing Department to make sure that the journal files are moved to the correct directory, the CD is created properly.
- Work with Great Lake data System to make sure that the disaster recovery documentation and software CDs are delivered to IT by them in a timely manner.

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

Project Name: Implement a Cash Register Monitoring System **Project ID:DA8112CA**

Business Objective

To help implement an online system developed by Great Lakes Data System to view electronic journal files and summary reports by the Auditing Division. (Estimated time for GLDS to complete is 40 hours for the viewer and 8 hours for the summary report.)

Major Deliverables

- On line system to view electronic journal files and summary reports installed on local computers in Auditing Division.

Approach

- Monitor the work performed by Great Lakes Data System to make sure that all the requirements listed by the Auditing division are met.

Benefits

See Return on Investment (ROI) Analysis Document

The project will allow the Auditing Division to capture cash register transaction data to use in its continuous auditing program. The summary reports will allow the Auditing Division to monitor and identify suspicious activities, track trends, and report on activities without impacting daily operations.

Impact

Number of Users 2-3 Auditing Division users

Divisions Auditing Division

Leadership Groups Finance/Admin

Risk

- **Business Environment** **Medium** – Project requires some changes to existing Business Process
- **Technical Environment** **Low** - proven and previously implemented technologies

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

Project Name: Implement a Cash Register Monitoring System **Project ID:DA8112CA**

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:	Pam Weipert	As needed
Business Analyst	Barb Ducharme	As needed

Facilities

- N/A

Technical

- N/A

Funding

- The Auditing Division requested that a 2006-2007 appropriation of \$10,000 be carried-forward to the 2007-2008 fiscal year budget to fund this project.

Other

- Much of the work will be completed by Great Lakes Data Systems, with minimal requirements from Oakland County Information Technology.

Priority

Constraints

- Committed resource are available from Great Lakes Data System to perform the programming required and to configure all the cash registers.

Exclusions

- The work effort by Great Lakes Data Systems (GLDS) is excluded from the total effort.

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

Project Name: Implement a Cash Register Monitoring System

Project ID: DA8112CA

PROJECT PHASE AUTHORIZATION

Phase(s): preliminary estimate		
Total Estimated Application Services	Hours: 40	Cost: \$4880
Total Estimated Technical Systems	Hours:	Cost:
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:	Cost:
Preliminary Estimated Development for Future Phases	Hours: 40	Cost: \$4880
Grand Total Estimated Development	Hours: 40	Cost: \$4880

Oakland County Department of Information Technology Project Scope and Approach

Project Name: Implement a Cash Register Monitoring System

Project ID: DA8112CA

PROJECT COMPLETION AUTHORIZATION

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

The screenshot shows the 'Open Workbench' application window. The title bar reads 'Open Workbench - [Implement a Cash Register Monitoring System - Size Estimate (+/- 10% to 50%)]'. The interface includes a menu bar (File, Edit, View, Tools, Window, Help), a toolbar, and a sidebar with various project management tools. The main workspace displays a table with the following data:

Type	ID	Task Name	Estimated Hours	Estimated Cost	Estimate Notes
Phase		MINI PROJECT PHASE	40	\$4,880.00	
			40	\$4,880.00	

The sidebar on the left contains the following items: Favorites, Size Estimates, Size Estimate - Project Mgt Totals, Size Estimate - Scope Change Management, Size Estimate (+/- 10% to 50%), Size Estimates - Te..., Master Planning, Customer Reporting, Status Reporting, Closed Project, Variance Reporting, Scope Change, Enhancement Budget, Assurance & Compliance, Weekly Analysis, Weekly Tracking, Project Approval Packet, Mini Project Approval, and Project Renegotiation. The taskbar at the bottom shows the Start button and several open applications: Microsoft Outlook, Clarity :: Project Properti..., Open Workbench - [L..., and DA8112CA.doc - Microso... The system clock shows 11:04 AM.

Oakland County
Implement a Cash Register Monitoring System
 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:	13,033	13,164	13,295	13,428	13,562	13,698	80,181
Cost Avoidance Subtotal:	0	0	0	0	0	0	0
Costs:							
Development Services Subtotal:	9,920	0	0	0	0	0	9,920
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	0	0	0	0	0	0	0
Infrastructure Subtotal:	0	0	0	0	0	0	0
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
Annual Statistics:							
Annual Total Savings	13,033	13,164	13,295	13,428	13,562	13,698	80,181
Annual Total Costs	9,920	0	0	0	0	0	9,920
Annual Return on Investment	3,113	13,164	13,295	13,428	13,562	13,698	70,261
Annual Costs/Savings Ratio	76.11%	0.00%	0.00%	0.00%	0.00%	0.00%	
Project Cumulative Statistics:							
Cumulative Total Savings	13,033	26,197	39,492	52,920	66,483	80,181	80,181
Cumulative Total Costs	9,920	9,920	9,920	9,920	9,920	9,920	9,920
Cumulative Return on Investment	3,113	16,277	29,572	43,000	56,563	70,261	70,261
Cumulative Cost/Savings Ratio	76.11%	37.87%	25.12%	18.75%	14.92%	12.37%	12.37%
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
Implement a Cash Register Monitoring System
 Return on Investment Analysis

Benefit/Savings Description	Project Savings Category	Savings Detail			Rate per Unit	Total Savings	Annual Multiplier
		Budget Category/Funding Source	Unit Desc	Units			
Travel time to pick up documents	Tangible Benefit	10100-1010201-181010-702010		234	48	11,246	1.010
Mileage to pick up documents	Tangible Benefit	10100-1010201-181010-731346		3,685	0	1,787	1.010
						0	

Oakland County
Implement a Cash Register Monitoring System
 Return on Investment Analysis

Benefit/Savings Description	Project Savings Category	Affects Project ROI?						Potential Savings Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
Travel time to pick up documents	Tangible Benefit	X	X	X	X	X	X	11,246	11,359	11,472	11,587	11,703	11,820
Mileage to pick up documents	Tangible Benefit	X	X	X	X	X	X	1,787	1,805	1,823	1,841	1,860	1,878

Oakland County
Implement a Cash Register Monitoring System
 Return on Investment Analysis

Benefit/Savings Description	Project Savings Category	Savings Detail		Unit Desc Entries		
		Savings Categories				
Travel time to pick up documents	Tangible Benefit	Tangible Benefit		ANN		
Mileage to pick up documents	Tangible Benefit	Cost Avoidance		EA		
				HR		

Oakland County
Implement a Cash Register Monitoring System
Return on Investment Analysis

Cost Description	Project Cost Category	Cost Detail			Rate per Unit	Total Cost	Annual Multiplier
		Budget Category/Funding Source	Unit Desc	Units			
IT Hours - New Development	Development Svcs		HR	40	122	4,880	
IT Hours - System Maintenance	Development Svcs				122	0	
User Hours - New Development	Development Svcs					0	
User Hours - PTNE/OT	Development Svcs					0	
Contractor Professional Services	Development Svcs	10100-1010201-181010-731458	HR	56	90	5,040	
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	
Package Software - Acquisition	Software					0	
Package Software - Maintenance	Software					0	
Business Objects Access	Software					0	
Term Emulation SFTW-Acquisition	Software					0	

Oakland County
Implement a Cash Register Monitoring System
 Return on Investment Analysis

Cost Description	Project Cost Category	Cost Detail			Rate per Unit	Total Cost	Annual Multiplier
		Budget Category/Funding Source	Unit Desc	Units			
Term Emulation SFTW-Maintenance	Software					0	
Server - Acquisition/Upgrade	Infrastructure					0	
Server - Maintenance	Infrastructure					0	
Server Sftwre - Acquisition/Upgrade	Infrastructure					0	
Server Sftwre - Maintenance	Infrastructure					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
Implement a Cash Register Monitoring System
 Return on Investment Analysis

Cost Description	Project Cost Category	Affects Project ROI						Potential Cost Extensions						
		Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6	
IT Hours - New Development	Development Svcs	X						4,880						
IT Hours - System Maintenance	Development Svcs													
User Hours - New Development	Development Svcs													
User Hours - PTNE/OT	Development Svcs													
Contractor Professional Services	Development Svcs	X						5,040						
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													
Package Software - Acquisition	Software													
Package Software - Maintenance	Software													
Business Objects Access	Software													
Term Emulation SFTW-Acquisition	Software													

Oakland County
Implement a Cash Register Monitoring System
 Return on Investment Analysis

Cost Description	Project Cost Category	Affects Project ROI						Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
Term Emulation SFTW-Maintenance	Software												
Server - Acquisition/Upgrade	Infrastructure												
Server - Maintenance	Infrastructure												
Server Sftwre - Acquisition/Upgrade	Infrastructure												
Server Sftwre - Maintenance	Infrastructure												
TBD	Infrastructure												
TBD	Infrastructure												
TBD	Infrastructure												
TBD	Infrastructure												
Internet Access	Infrastructure												
Project Staff Training	Training												
User Training	Training												

Oakland County
Implement a Cash Register Monitoring System
 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	4,880						4,880
IT Hours - System Maintenance							
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services	5,040						5,040
<i>Development Services Subtotal:</i>	9,920						9,920
Hardware:							
<i>Hardware Subtotal:</i>							
Software:							
<i>Software Subtotal:</i>							
Infrastructure:							
<i>Infrastructure Subtotal</i>							
Training:							
<i>Training Subtotal:</i>							
Other:							
<i>Other Subtotal:</i>							
Costs Total:	9,920						9,920

Oakland County
Implement a Cash Register Monitoring System
 Return on Investment Analysis

Date	Assumption Description
15-Oct-07	Contractor Professional Services units and rates based on March 25, 2006 Proposal from Great Lakes Data Systems.
15-Oct-07	Great Lakes Data Systems cash registers are located at 8 locations - Clerk / Register of Deeds, Treasurer's Office, Probate Court, Health Division - Pontiac, One Stop Shop, Health Division - Walled Lake, Animal Control, and Health Division - Southfield.
	By allowing the Auditing Division to electronically download the transaction data, the Auditing Division will not have to travel to each site to pick up weekly transaction information.
	Round trip mileage to the three off-campus sites is 71 miles; yielding an annual mileage savings of 3,692 miles, or \$1,787 (at the current mileage reimbursement rate of \$.0485/mile).
	Round trip travel time is estimated to be 4.5 hours per week, or 234 hours per year. The estimated hourly cost (including salary and fringe benefits) for an Auditor II to pick up the transaction information is \$48.06 / hour in 2008.
	Time saved at departments to pull and copy transactional data for Auditing Division will be offset by additional time spent by Auditing Division staff to analyze transactions.
15-Oct-07	Additional benefits -
	Transaction backup file maintained by Oakland County (currently maintained by Great Lakes Data Systems).
	Ability to "continuously" monitor transactional activity to identify red flag transactions and patterns before cash shortage is detected.