

Oakland County Department of Information Technology Project Scope and Approach

Project Name: ArcGIS Routing Application

Project ID: D18182RT

Leadership Group: Land			
Department: Information Technology		Division: Application Services	
Project Sponsor: Scott Oppmann	Date Requested: 5/1/2008	PM Customer No. 182	
Request Type:	<i>New Development X</i>	<i>Enhancement</i>	<i>Customer Support</i>
	<i>Planned System Maintenance or Upgrade</i>		
IT Team Name: Land Management Data Services		IT Team No: 1	
Project Manager/Leader: Chris Crespi			
Account Number: 30003	Account Description: IT GIS	Customer Name:	Application Services
Grant Funded? Yes No X	Mandate?	Yes	No X
	Mandate Source:		

Project Goal

To create a standard, enterprise-wide routing and stop-optimization GIS application so that other County applications can save time and money by incorporating this functionality into their daily workflow.

Business Objective

To gather requirements for a standardized, enterprise-wide, GIS-based application that will allow users to input multiple destination locations (e.g., inspection sites) and will output an optimized route, including turn-by-turn directions.

Major Deliverables

- Application Specification Document (ASD)
- Detailed Project Plan for Design/Construction/Implementation

Approach

- Gather and document detailed user requirements for optimized routing from Health, Drain, and Equalization customers
- Gather and document detailed user requirements for enhancements to the Real Time Locator (RTL) application from Drain customers
- Gather and document detailed IT requirements
- Develop Detailed Project Plan for Design/Construction/Implementation of an Enterprise-wide routing application
- Develop Detailed Project Plan for Design/Construction/Implementation of enhancements to the RTL application

Benefits

**Oakland County
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See Return on Investment (ROI) Analysis Document

Impact

Number of Users Unlimited

Divisions All departments performing fleet management

Leadership Groups Land

Risk

Business Environment High: Product dramatically changes existing business processes.

Technical Environment High: New or non-standard technology.

Assumptions

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

Facilities

- Facilities will be available for currently hired staff. No additional staffing requirements.

Technical

- This project is dependent on the completion of the road centerline data migration, which is part of a Planned Maintenance project in the 2007-2008 Master Plan.

Funding

- IT
-

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Other

-

Priority

-

Constraints

- Only functionality that is considered applicable to the enterprise will be added to this application. Each development team will customize the application to suit specific customer needs.

Exclusions

-
-

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PROJECT PHASE AUTHORIZATION

Phase(s):	
Total Estimated Application Services	Hours: 480 Cost: \$58,560
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: 480 Cost: \$58,560
Preliminary Estimated Development for Future Phases	Hours: Cost:
Grand Total Estimated Development	Hours: 480 Cost: \$58,560

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:

The screenshot shows a software interface with a menu bar (File, Edit, View, Tools, Window, Help) and a toolbar. A sidebar on the left contains 'Favorites' and 'Size Estimates' categories with various icons. The main area displays a table with the following data:

Type	ID	Task Name	Estimated Hours	Estimated Cost	Estimate Notes
Phase	000000	PROJECT MANAGEMENT	96	\$11,712.00	
Phase	040000	BUSINESS SYSTEM DESIGN	384	\$46,848.00	
			480	\$58,560.00	

D18182RT - ArcGIS Routing Application

3.1 - Provide an Enhanced Application Service Offering

- | | |
|---|--|
| 3.1.1 - Increase application integration through web services <input checked="" 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 checked="" 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 -- ArcGIS Routing Application
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	38,059	76,119	114,178	152,238	190,297	570,891
Costs:							
Development Services Subtotal:	58,560	0	0	0	0	0	58,560
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	0	38,059	76,119	114,178	152,238	190,297	570,891
Annual Total Costs	58,560	0	0	0	0	0	58,560
Annual Return on Investment	(58,560)	38,059	76,119	114,178	152,238	190,297	512,331
Annual Costs/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Project Cumulative Statistics:							
Cumulative Total Savings	0	38,059	114,178	228,356	380,594	570,891	570,891
Cumulative Total Costs	58,560	58,560	58,560	58,560	58,560	58,560	58,560
Cumulative Return on Investment	(58,560)	(20,501)	55,618	169,796	322,034	512,331	512,331
Cumulative Cost/Savings Ratio	0.00%	153.86%	51.29%	25.64%	15.39%	10.26%	10.26%
Year Positive Payback Achieved			Year 3				Year 3
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 -- ArcGIS Routing Application
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	480	122	58,560		x							
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					0									
PC System - Acquisition	Hardware					0									
PC System - Maintenance	Hardware					2,304									
Notebook - Acquisition	Hardware					0									
Notebook - Maintenance	Hardware					2,372									
Mini Notebook - Acquisition	Hardware					0									
Mini Notebook - Maintenance	Hardware					2,196									
Laserprinter 1 - Acquisition	Hardware					0									
Laserprinter 1 - Maintenance	Hardware					1,104									
Laserprinter 2 - Acquisition	Hardware					0									
Laserprinter 2 - Maintenance	Hardware					1,208									
Laserprinter 3 - Acquisition	Hardware					0									
Laserprinter 3 - Maintenance	Hardware					1,860									
Image Workstations - Acquisition	Hardware					0									
Image Workstations - Maintenance	Hardware					3,496									
Terminals - Acquisition	Hardware					0									
Terminals - Maintenance	Hardware					644									
PRTR w/TERM ID - Acquisition	Hardware					0									
PRTR w/TERM ID - Maintenance	Hardware					1,072									
PRTR w/o TERM ID - Acquisition	Hardware					0									
PRTR w/o TERM ID - Maintenance	Hardware					1,072									
PC Maintenance User Owned	Hardware					2,304									
Printer Maintenance User Owned	Hardware					1,072									
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					0									
Server - Maintenance	Infrastructure					0									
Server Sftwre - Acquisition/Upgrade	Infrastructure					0									

Oakland County -- ArcGIS Routing Application
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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
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 -- ArcGIS Routing Application
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	58,560.00					
IT Hours - System Maintenance	Development Svcs						
User Hours - New Development	Development Svcs						
User Hours - PTNE/OT	Development Svcs						
Contractor Professional Services	Development Svcs						
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						
Term Emulation SFTW-Maintenance	Software						
Server - Acquisition/Upgrade	Infrastructure						
Server - Maintenance	Infrastructure						
Server Sftwre - Acquisition/Upgrade	Infrastructure						

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Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Server Sftwre - Maintenance	Infrastructure						
TBD	Infrastructure						
TBD	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	58,560						58,560
IT Hours - System Maintenance							
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
<i>Development Services Subtotal:</i>	58,560						58,560
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:	58,560						58,560

