

# Oakland County Department of Information Technology Project Scope and Approach

**Project Name: Enterprise Search Implementation**

**Project ID: DE8187ES**

<b>Leadership Group: IT Steering Committee</b>			
<b>Department: Information Technology</b>		<b>Division: Application Services</b>	
<b>Project Sponsor: Ed Poisson</b>	<b>Date Requested:</b>	<b>PM Customer No. 187</b>	
<b>Request Type:</b>	<u><i>New Development</i></u>	<i>Enhancement</i>	<i>Customer Support</i>
	<i>Planned System Maintenance or Upgrade</i>		
<b>IT Team Name: eGovernment Program Services</b>		<b>IT Team No: E</b>	
<b>Project Manager/Leader:</b>			
<b>Account Number:</b> 30004	<b>Account Description:</b> IT - eGovernment	<b>Customer Name:</b>	IT - eGovernment
<b>Grant Funded?</b> Yes <u>No</u>	<b>Mandate?</b> Yes <u>No</u>	<b>Mandate Source:</b>	

## **Project Goal**

To implement a universal enterprise search solution so that access to County data will be easier and more secure.

## **Business Objective**

Centralize and streamline employee access to data; increase productivity and opportunities for collaboration; reduce duplication of work, redundancy of stored data, and the amount of time spent looking for necessary information; leverage existing identity and access management systems to ensure the security and integrity of information at the document or file level.

### **Major Deliverables**

- Detailed Project Plan and Return on Investment
- Risk Management Plan
- Communication Plan
- Issue Logs
- Requirements Document
- Prioritized Recommended Actions List
- Enterprise Search Service
- Policies and Procedures
- Support Plan
- Training
- Marketing and Promotion Plan
- Metrics Measuring Document

### **Approach**

# Oakland County Department of Information Technology Project Scope and Approach

**Project Name: Enterprise Search Implementation**

**Project ID: DE8187ES**

- Gather and document enterprise search requirements
- Evaluate solution alternatives based on requirements
- Conduct cost/benefit analysis of alternatives and recommend a solution
- Review/Send RFP based on requirements if required
- Review Proposals, select or build solution
- Determine implementation sequence and phasing
- Develop and document policies and procedures
- Develop and implement Training Plan
- Develop and implement Support Plan
- Launch/implement enterprise search on County web sites
- Develop/implement Marketing and Promotion Plan
- Create method of measuring results (e.g. increased usage of search utility)
- Conduct results measurement

## **Benefits**

### ***See Return on Investment (ROI) Analysis Document***

Benefits will be realized through increased operational efficiencies, improved employee productivity, and greater customer satisfaction for all users of County enterprise data. Combining user-based security permissions with a single universal search interface will enhance the ability of search users to quickly locate the most relevant information available. Leveraging existing identity and access management schemes in the implementation of a new enterprise search solution further increases the return on investments already made. Extending an enterprise search solution to encompass County data, data hosted for other governmental organizations, and externally hosted data maximizes the potential economy of scale. By improving self-service options to locate and access information, Oakland County saves time and money for government and citizens.

## **Impact**

<b>Number of Users</b>	4050 County employees More than 2.6 million visitors to County Web site(s) (FY07 total)
<b>Divisions</b>	ALL
<b>Leadership Groups</b>	ALL

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

**Project Name: Enterprise Search Implementation**

**Project ID: DE8187ES**

---

**Risk**

**Business Environment**      Low – Little to 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:	Ed Poisson	N/A

**Facilities**

- No additional space or facility resources are required.

**Technical**

- N/A

**Funding**

- Information Technology

**Other**

- N/A

**Priority**      TBD

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

**Project Name: Enterprise Search Implementation**

**Project ID: DE8187ES**

---

**Constraints**

- Resource Availability

**Exclusions**

- N/A

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

**Project Name: Enterprise Search Implementation**

**Project ID: DE8187ES**

**PROJECT PHASE AUTHORIZATION**

<b>Phase(s):</b>	
<b>Total Estimated Application Services</b>	<b>Hours: 830 Cost: \$101,260</b>
<b>Total Estimated Technical Systems</b>	<b>Hours: 250 Cost: \$11,590</b>
<b>Total Estimated CLEMIS</b>	<b>Hours: Cost:</b>
<b>Total Estimated Internal Services</b>	<b>Hours: Cost:</b>
<b>IT Application Services Division Manager Approval:</b>	<b>Date:</b>
<b>IT Technical Systems Division Manager Approval:</b>	<b>Date:</b>
<b>IT CLEMIS Division Manager Approval:</b>	<b>Date:</b>
<b>IT Internal Services Division Manager Approval:</b>	<b>Date:</b>
<b>IT Management Approval:</b>	
Approved:            Yes            No	<b>Date:</b>
Reason:	
<b>Project Sponsor Approval:</b>	
Title:	<b>Date:</b>

**PROJECT SUMMARY**

<b>Authorized Development (see above)</b>	<b>Hours:</b>	<b>Cost:</b>
<b>Preliminary Estimated Development for Future Phases</b>	<b>Hours: 1080</b>	<b>Cost: \$112,850</b>
<b>Grand Total Estimated Development</b>	<b>Hours: 1080</b>	<b>Cost: \$112,850</b>

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

**Project Name: Enterprise Search Implementation**

**Project ID: DE8187ES**

**PROJECT COMPLETION AUTHORIZATION**

<b>Customer Acceptance of Product:</b>	
Title:	Date:
<b>Project Office Review:</b>	Date:

# Oakland County Department of Information Technology Project Scope and Approach

**Project Name: Enterprise Search Implementation**

**Project ID: DE8187ES**

Enterprise Search Implementation - Size Estimate (+/- 10% to 50%)

Type	ID	Task Name	Estimated Hours	Estimated Cost	Estimate Notes
3	000000	PROJECT MANAGEMENT	236	\$28,792.00	
Phase	021000	FEASIBILITY STUDY	65	\$7,930.00	
Phase	030000	BUSINESS AREA REQUIREMENTS	135	\$13,420.00	
Phase	041000	DESIGN	115	\$10,980.00	
Phase	050000	TECHNICAL DESIGN	95	\$8,540.00	
Phase	060000	PROGRAMMING	135	\$13,420.00	
Phase	070000	IMPLEMENTATION	174	\$17,568.00	
Phase	080000	POST IMPLEMENTATION SUPPORT	125	\$12,200.00	
			1,080	\$112,850.00	

**DE8187ES - Enterprise Search Implementation**

**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 -- Enterprise Search Implementation**  
Return on Investment Analysis

Project Summary

Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
<b>Benefits/Savings:</b>							
Tangible Benefits Subtotal:	51,000	51,000	51,000	51,000	51,000	51,000	306,000
Cost Avoidance Subtotal:	0	0	0	0	0	0	0
<b>Costs:</b>							
Development Services Subtotal:	131,760	13,176	13,176	13,176	13,176	13,176	197,640
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	0	0	0	0	0	0	0
Infrastructure Subtotal	7,695	875	875	875	875	875	12,070
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
<b>Annual Statistics:</b>							
Annual Total Savings	51,000	51,000	51,000	51,000	51,000	51,000	306,000
Annual Total Costs	139,455	14,051	14,051	14,051	14,051	14,051	209,710
Annual Return on Investment	(88,455)	36,949	36,949	36,949	36,949	36,949	96,290
Annual Costs/Savings Ratio	273.44%	27.55%	27.55%	27.55%	27.55%	27.55%	
<b>Project Cumulative Statistics:</b>							
Cumulative Total Savings	51,000	102,000	153,000	204,000	255,000	306,000	306,000
Cumulative Total Costs	139,455	153,506	167,557	181,608	195,659	209,710	209,710
Cumulative Return on Investment	(88,455)	(51,506)	(14,557)	22,392	59,341	96,290	96,290
Cumulative Cost/Savings Ratio	273.44%	150.50%	109.51%	89.02%	76.73%	68.53%	68.53%
Year Positive Payback Achieved				Year 4			Year 4
State or Federal Mandate?							
<b>Signatures:</b>							
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 -- Enterprise Search Implementation**

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
Increased online transactions	Tangible Benefit		EA	20,000	3	51,000	
Intangible: Increased operational efficiencies, improved employee productivity, and greater customer satisfaction for all users of County enterprise data.						0	
Intangible: Combining user-based security permissions with a single universal search interface will enhance the ability of search users to quickly locate the most relevant information available.						0	
Intangible: Extending an enterprise search solution to encompass County data, data hosted for other governmental organizations, and externally hosted data maximizes the potential economy of scale.						0	
Intangible: By improving self-service options to locate and access information, Oakland County saves time and money for government and citizens.						0	
						0	
						0	
						0	
						0	

**Oakland County -- Enterprise Search Implementation**  
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
Increased online transactions	Tangible Benefit	x	x	x	x	x	x	51,000.00	51,000.00	51,000.00	51,000.00	51,000.00	51,000.00
Intangible: Increased operational efficiencies, improved employee productivity, and greater customer satisfaction for all users of County enterprise data.													
Intangible: Combining user-based security permissions with a single universal search interface will enhance the ability of search users to quickly locate the most relevant information available.													
Intangible: Extending an enterprise search solution to encompass County data, data hosted for other governmental organizations, and externally hosted data maximizes the potential economy of scale.													
Intangible: By improving self-service options to locate and access information, Oakland County saves time and money for government and citizens.													





**Oakland County -- Enterprise Search Implementation**  
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		EA	1,080	122	131,760		x							
IT Hours - System Maintenance	Development Svcs			108	122	13,176			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	Development Svcs					0									
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		ANN	1	360	360			x	x	x	x	x	x	
Server Sftwre - Acquisition/Upgrade	Infrastructure		ANN	1	335	335		x	x	x	x	x	x	x	
Server Sftwre - Maintenance	Infrastructure					0									
Server Rack Mount	Infrastructure		EA	1	400	400		x							
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure				21,372	0									
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure				3,432	0									

## Oakland County -- Enterprise Search Implementation

## 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		
MS SQL Server Standard Per Processor - Includes Year 1 Maintenance	Infrastructure				4,725	0									
MS SQL Server Standard Per Processor - Year 2 and Beyond	Infrastructure				946	0									
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									
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									
Server - Acquisition/Upgrade	Infrastructure		EA	1	6,780	6,780		x							
Server Sftwre - Acquisition/Upgrade	Infrastructure					0									
Server Sftwre - Maintenance	Infrastructure					0									
TBD	Infrastructure					0									
Internet Access	Infrastructure		ANN	1	180	180		x	x	x	x	x	x	x	
Project Staff Training	Training					0									
User Training	Training					0									

## Oakland County -- Enterprise Search Implementation

## 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	131,760.00					
IT Hours - System Maintenance	Development Svcs		13,176.00	13,176.00	13,176.00	13,176.00	13,176.00
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	Development Svcs						
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		360.00	360.00	360.00	360.00	360.00
Server Sftwre - Acquisition/Upgrade	Infrastructure	335.00	335.00	335.00	335.00	335.00	335.00
Server Sftwre - Maintenance	Infrastructure						
Server Rack Mount	Infrastructure	400.00					
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure						
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure						

**Oakland County -- Enterprise Search Implementation**  
Return on Investment Analysis

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						
MS SQL Server Standard Per Processor - Year 2 and Beyond	Infrastructure						
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						
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						
Server - Acquisition/Upgrade	Infrastructure	6,780.00					
Server Sftwre - Acquisition/Upgrade	Infrastructure						
Server Sftwre - Maintenance	Infrastructure						
TBD	Infrastructure						
Internet Access	Infrastructure	180.00	180.00	180.00	180.00	180.00	180.00
Project Staff Training	Training						
User Training	Training						

**Oakland County -- Enterprise Search Implementation**  
Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
<b>Development Services:</b>							
IT Hours - New Development	131,760						131,760
IT Hours - System Maintenance		13,176	13,176	13,176	13,176	13,176	65,880
IT Hours - Customer Support							
IT Hours - Planned Maintenance							
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
<i>Development Services Subtotal:</i>	<b>131,760</b>	<b>13,176</b>	<b>13,176</b>	<b>13,176</b>	<b>13,176</b>	<b>13,176</b>	<b>197,640</b>
<b>Hardware:</b>							
<i>Hardware Subtotal:</i>							
<b>Software:</b>							
<i>Software Subtotal:</i>							
<b>Infrastructure:</b>							
Server - Maintenance		360.00	360.00	360.00	360.00	360.00	1,800
Server Sftwre - Acquisition/Upgrade	335.00	335.00	335.00	335.00	335.00	335.00	2,010
Server Rack Mount	400.00	0.00	0.00	0.00	0.00	0.00	400
Server - Acquisition/Upgrade	6,780.00						6,780
Server Sftwre - Acquisition/Upgrade							
Server Sftwre - Maintenance							
Internet Access	180.00	180.00	180.00	180.00	180.00	180.00	1,080
<i>Infrastructure Subtotal</i>	<b>7,695</b>	<b>875</b>	<b>875</b>	<b>875</b>	<b>875</b>	<b>875</b>	<b>12,070</b>
<b>Training:</b>							
<i>Training Subtotal:</i>							
<b>Other:</b>							
<i>Other Subtotal:</i>							
<b>Costs Total:</b>	<b>139,455</b>	<b>14,051</b>	<b>14,051</b>	<b>14,051</b>	<b>14,051</b>	<b>14,051</b>	<b>209,710</b>

**Oakland County -- Enterprise Search Implementation**

Return on Investment Analysis

Assumptions

Date	Assumption Description
16-Apr-08	Monthly average: 14,000 successful searches and 2,000 searches that return no result
	Assume enterprise search will increase successful web site searches by 20,000 per year
	Annual cost savings of successful web site searches:
	(Transactions) x 2.55 (estimated cost of transaction of a Clerk I - 3 Year Salary with Fringe for 5 minutes to respond to call, printing, envelope and postage costs
	Assume annual cost savings of enterprise search due to increased number of successful site searches:
	20,000 x \$2.55 = \$51,000
06-May-08	<u>Server Cost Assumptions</u>
	1 Server \$7,695 Annual Maintence begin year 2 \$875
	Dell 2950III Physical Server w/ 300 GB disk, 8 GB RAM \$6,780 (one time)
	Server - Maintenance \$360 beginning year 2
	Server Sftwre - Acquisition/Upgrade \$335 annually
	Server Rack Mount \$400 (one time)
	Internet Access \$180 (annually)