

# Oakland County Department of Information Technology Project Scope and Approach

**Project Name: Data Warehouse Expansion**

**Project ID: DB9312DW**

<b>Leadership Group: Courts/Justice Administration</b>			
<b>Department: Circuit &amp; Probate Court</b>		<b>Division: Court Business</b>	
<b>Project Sponsor: John Cooperrider</b>	<b>Date Requested: 2/11/18</b>	<b>PM Customer No. 312</b>	
<b>Request Type:</b>		<b>New Development</b>	
<b>IT Team Name: Courts</b>		<b>IT Team No: B</b>	
<b>Project Manager/Leader: Patti Smutzki</b>			
<b>Account Number: 95174</b>	<b>Account Description: CTS-JUDICIAL ADMIN</b>	<b>Customer Name:</b>	<b>Courts</b>
<b>Grant Funded?</b>	<b>No</b>	<b>Mandate?</b>	<b>No</b>
		<b>Mandate Source:</b>	

## **Project Goal**

To expand the use of the Data Warehouse to include Juvenile case data so that reporting is available to the Circuit and Probate Courts.

## **Business Objective**

The Circuit and Probate Courts need access to Juvenile case data that is not currently available through existing reporting. Also, they would like to expand the amount of time all case data is available, validate case age calculation, and include information on filings of documents same as how it is done in the County Clerk Universe.

## **Major Deliverables**

- Detailed Project Plan
- Application and/or System Requirements
- Technical Design Document
- Technical Architecture Diagram
- User Acceptance Test Plan
- Implementation Plan
- Application Code
- Disaster Recovery Toolkit
- Service Center Knowledge Documents

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## **Approach**

- Develop Detailed Project Plan
- Document system requirements
- Determine and document system architecture and diagram
- Conduct Tech Review
- Develop Implementation Plan
- Develop User Acceptance Test Plan
- Test new system
- Acquire User Acceptance Sign off
- Conduct Change Control
- Develop User Documentation, SLA, Disaster Recovery Toolkit, Service Center Knowledge Documents
- Train users on new system
- Release new system into production

## **Research & Analysis**

**Gartner Research Recommendation** - Nothing Found.

## **Benefits**

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

## **Impact**

### **Number of Users**

Impact to both Circuit and Probate court users, administration, and elected officials.

Approximately 10 new warehouse users and as many as 31 new report recipients.

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**Divisions**                      Court Business

**Leadership Groups**    Courts/Justice Administration

**Risk**

**Business Environment**

**Low** – Little or no impact to existing business processes.

**Technical Environment**

**Low**– Proven and previously implemented technologies.

**Assumptions**

**Staffing**            IT Staffing: resources will be available for the hours indicated in the project plan.

Other Staffing: additional staffing will be available as follows:

<b><u>Role:</u></b>	<b><u>Name</u></b>	<b><u>Hours per Day</u></b>
Project Sponsor:	John Cooperrider	As Needed
	Christina Bujak	As Needed

**Facilities**

- 

**Technical**

- 

**Funding**

- 

**Other**

- 

**Priority**

-

**Oakland County  
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**Constraints**

- 
- 

**Exclusions**

- 
-

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**PROJECT PHASE AUTHORIZATION**

<b>Phase(s): Project Management, Requirements, Design, Programming, Implementation, Post Implementation</b>	
<b>Total Estimated Application Services</b>	<b>Hours: 724</b>
<b>Total Estimated Technical Systems</b>	<b>Hours: 72</b>
<b>Total Estimated CLEMIS</b>	<b>Hours:</b>
<b>Total Estimated Internal Services</b>	<b>Hours:</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: <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Date:</b>
Reason:	
<b>Project Sponsor Approval:</b>	
<b>Title:</b>	<b>Date:</b>

**PROJECT SUMMARY**

<b>Authorized Development (see above)</b>	<b>Hours:</b>	
<b>Preliminary Estimated Development for Future Phases</b>	<b>Hours:</b>	
<b>Grand Total Estimated Development</b>	<b>Hours: 796</b>	<b>Cost: 131,340.00</b>

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## PROJECT COMPLETION AUTHORIZATION

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

### Data Warehouse Expansion - Size Estimate (+/- 10% to 50%)

1	Type	ID	Task Name	Estimated
2				Hours
3		000000	PROJECT MANAGEMENT	197
4	Phase	030000	BUSINESS AREA REQUIREMENTS	75
5	Phase	050000	TECHNICAL DESIGN	60
6	Phase	060000-0	PROGRAMMING	340
7	Phase	070000	IMPLEMENTATION	60
8	Phase	080000	POST IMPLEMENTATION SUPPORT	64
9				796

**Oakland County -- Data Warehouse Expansion**

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:	342	342	342	342	342	342	2,052
Cost Avoidance Subtotal:	132,495	135,145	137,848	140,605	143,417	146,285	835,794
<b>Costs:</b>							
Development Services Subtotal:	139,260	7,920	7,920	7,920	7,920	7,920	178,860
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
<b>Annual Statistics:</b>							
Annual Total Savings	132,837	135,487	138,190	140,947	143,759	146,627	837,846
Annual Total Costs	139,260	7,920	7,920	7,920	7,920	7,920	178,860
Annual Return on Investment	(6,423)	127,567	130,270	133,027	135,839	138,707	658,986
Annual Costs/Savings Ratio	104.84%	5.85%	5.73%	5.62%	5.51%	5.40%	
<b>Project Cumulative Statistics:</b>							
Cumulative Total Savings	132,837	268,324	406,513	547,460	691,219	837,846	837,846
Cumulative Total Costs	139,260	147,180	155,100	163,020	170,940	178,860	178,860
Cumulative Return on Investment	(6,423)	121,144	251,413	384,440	520,279	658,986	658,986
Cumulative Cost/Savings Ratio	104.84%	54.85%	38.15%	29.78%	24.73%	21.35%	21.35%
Year Positive Payback Achieved		Year 2					Year 2
State or Federal Mandate?							
<b>Signatures:</b>							
Benefits Reviewed By Project Sponsor	Date: _____						
Costs (including IT Resources) Reviewed By Information Technology Project Manager	Date: _____						

## Oakland County -- Data Warehouse Expansion

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
Reduce need to manually calculate information from multiple sources to prepare reports (level 12)	Cost Avoidance		ANN	1,050	51.76	54,348	1.020
Eliminate extra paper reports that must be printed to extract data	Tangible Benefit	10100-3010301-121130-774637	ANN	11,400	0.03	342	1.000
Eliminate additional IT involvement to create adhoc reports	Cost Avoidance		ANN	80	165	13,200	1.020
Reduce need to manually calculate information from multiple sources to prepare reports (level 16)	Cost Avoidance		ANN	500	63.00	31,500	1.020
Reduce need to manually calculate information from multiple sources to prepare reports (level 14)	Cost Avoidance		ANN	500	56.56	28,280	1.020
Reduce need to manually calculate information from multiple sources to prepare reports (level 20)	Cost Avoidance		ANN	52	78.46	4,080	1.020
Improved efficiency by access to statistical data	Intangible Benefit						
						0	
						0	



**Oakland County -- Data Warehouse Expansion**

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
Reduce need to manually calculate information from multiple sources to prepare reports (level 12)	Cost Avoidance	x	x	x	x	x	x	55,434.96	56,543.66	57,674.53	58,828.02	60,004.58	61,204.68
Eliminate extra paper reports that must be printed to extract data	Tangible Benefit	x	x	x	x	x	x	342.00	342.00	342.00	342.00	342.00	342.00
Eliminate additional IT involvement to create adhoc reports	Cost Avoidance	x	x	x	x	x	x	13,200.00	13,464.00	13,733.28	14,007.95	14,288.10	14,573.87
Reduce need to manually calculate information from multiple sources to prepare reports (level 16)	Cost Avoidance	x	x	x	x	x	x	31,500.00	32,130.00	32,772.60	33,428.05	34,096.61	34,778.55
Reduce need to manually calculate information from multiple sources to prepare reports (level 14)	Cost Avoidance	x	x	x	x	x	x	28,280.00	28,845.60	29,422.51	30,010.96	30,611.18	31,223.41
Reduce need to manually calculate information from multiple sources to prepare reports (level 20)	Cost Avoidance	x	x	x	x	x	x	4,079.92	4,161.52	4,244.75	4,329.64	4,416.24	4,504.56
Improved efficiency by access to statistical data	Intangible Benefit	x	x	x	x	x	x	0.00	0.00	0.00	0.00	0.00	0.00

## Oakland County -- Data Warehouse Expansion

Return on Investment Analysis  
Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
<b>Tangible Benefit:</b>							0
Eliminate extra paper reports that must be printed to extract data	342	342	342	342	342	342	2,052
<i>Tangible Benefits Subtotal:</i>	<b>342</b>	<b>342</b>	<b>342</b>	<b>342</b>	<b>342</b>	<b>342</b>	<b>2,052</b>
							0
<b>Cost Avoidance:</b>							
Reduce need to manually calculate information from multiple sources to prepare reports (level 12)	55,435	56,544	57,675	58,828	60,005	61,205	349,690
Eliminate additional IT involvement to create adhoc reports	13,200	13,464	13,733	14,008	14,288	14,574	83,267
Reduce need to manually calculate information from multiple sources to prepare reports (level 16)	31,500	32,130	32,773	33,428	34,097	34,779	198,706
Reduce need to manually calculate information from multiple sources to prepare reports (level 14)	28,280	28,846	29,423	30,011	30,611	31,223	178,394
Reduce need to manually calculate information from multiple sources to prepare reports (level 20)	4,080	4,162	4,245	4,330	4,416	4,505	25,737
<i>Cost Avoidance Subtotal:</i>	<b>132,495</b>	<b>135,145</b>	<b>137,848</b>	<b>140,605</b>	<b>143,417</b>	<b>146,285</b>	<b>835,794</b>
<b>Intangible Benefit:</b>							
Improved efficiency by access to statistical data	0	0	0	0	0	0	0
<b>Savings Total:</b>	<b>132,837</b>	<b>135,487</b>	<b>138,190</b>	<b>140,947</b>	<b>143,759</b>	<b>146,627</b>	<b>837,846</b>

**Oakland County -- Data Warehouse Expansion**

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			796	165	131,340	1.000	x						
IT Hours - System Maintenance	Development Svcs			24	165	3,960	1.000	x	x	x	x	x	x	
IT Hours - Customer Support	Development Svcs			24	165	3,960	1.000	x	x	x	x	x	x	
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				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								

**Oakland County -- Data Warehouse Expansion**  
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								
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 -- Data Warehouse Expansion**

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	131,340.00					
IT Hours - System Maintenance	Development Svcs	3,960.00	3,960.00	3,960.00	3,960.00	3,960.00	3,960.00
IT Hours - Customer Support	Development Svcs	3,960.00	3,960.00	3,960.00	3,960.00	3,960.00	3,960.00
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						
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						

**Oakland County -- Data Warehouse Expansion**  
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						
TBD	Infrastructure						
TBD	Infrastructure						
TBD	Infrastructure						
TBD	Infrastructure						
Internet Access	Infrastructure						
Project Staff Training	Training						
User Training	Training						

**Oakland County -- Data Warehouse Expansion**

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	131,340						131,340
IT Hours - System Maintenance	3,960	3,960	3,960	3,960	3,960	3,960	23,760
IT Hours - Customer Support	3,960	3,960	3,960	3,960	3,960	3,960	23,760
<i>Development Services Subtotal:</i>	<b>139,260</b>	<b>7,920</b>	<b>7,920</b>	<b>7,920</b>	<b>7,920</b>	<b>7,920</b>	<b>178,860</b>
<b>Hardware:</b>							
<i>Hardware Subtotal:</i>							
<b>Software:</b>							
<i>Software Subtotal:</i>							
<b>Infrastructure:</b>							
<i>Infrastructure Subtotal:</i>							
<b>Training:</b>							
<i>Training Subtotal:</i>							
<b>Other:</b>							
<i>Other Subtotal:</i>							
<b>Costs Total:</b>	<b>139,260</b>	<b>7,920</b>	<b>7,920</b>	<b>7,920</b>	<b>7,920</b>	<b>7,920</b>	<b>178,860</b>

