

Oakland County Department of Information Technology Project Scope and Approach

Project Name: Equalization Property Split Workflow

Project ID: D99125PS

Leadership Group: Land			
Department: Management & Budget		Division: Equalization	
Project Sponsor: David Hieber	Date Requested: 2/15/18	PM Customer No. 125	
Request Type:	<i>New Development</i> ✓	<i>Enhancement</i>	<i>Customer Support</i>
	<i>Planned System Maintenance or Upgrade</i>		
IT Team Name: Assessing and Taxation		IT Team No: 9	
Project Manager/Leader: Wendy Conklin			
Account Number: 31075	Account Description: Equal - Development	Customer Name:	Equalization
Grant Funded? Yes No ✓	Mandate? Yes No ✓	Mandate Source:	

Project Goal

To create an electronic property split workflow application for Assessors to submit property splits to the Oakland County Land Description Department so that forms/documentation submitted, notifications and parcel creation status can be tracked.

Business Objective

To improve customer service and time spent on follow up and inquiry calls after a new property split has been created.

Major Deliverables

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

Approach

- Develop Detailed Project Plan

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- Review current business process and conduct needs assessment with customer, ensuring current manual processes are refined and automated.
- Document system requirements
- Determine and document system architecture and diagram
- Assess User Hardware and Software Requirements
- Conduct Tech Review
- Develop Implementation Plan
- Develop new system
- 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

Research Completed – Nothing Found

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users 57

Divisions Equalization

Leadership Groups Land

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Risk

Business Environment Medium - Project will require some changes 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 project plan.
- Equalization Staffing: clerical and appraiser staff will be available as needed.

<u>Role:</u>	<u>Name</u>	<u>Hours per Day</u>
Project Sponsor	Dave Hieber	6:30am – 3:30pm
Application Knowledge Expert	Brenda Firestine	As Needed

Facilities

- NA

Technical

- The current 'To Do List' within the LAMS application to be used for indicating when a property split is completed.

Funding

- Information Technology

Other

-

Priority

- TBD

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Constraints

-
-

Exclusions

-
-

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PROJECT PHASE AUTHORIZATION

Phase(s): All	
Total Estimated Application Services	Hours: 771
Total Estimated Technical Systems	Hours: 31
Total Estimated CLEMIS	Hours:
Total Estimated Internal Services	Hours:
IT Application Services Division Manager Approval:	Date:
IT Technical Systems 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: 802	
Preliminary Estimated Development for Future Phases	Hours:	
Grand Total Estimated Development	Hours: 802	Cost: \$132,330

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PROJECT COMPLETION AUTHORIZATION

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

Equalization Property Split Workflow - Size Estimate (+/- 10% to 50%)

1	Type	ID	Task Name	Estimated
2				Hours
3	3	000000	PROJECT MANAGEMENT	191
4	Phase	200000	DEFINE BUSINESS REQUIREMENTS	72
5	Phase	300000	DESIGN SYSTEM ARCHITECTURE	83
6	Phase	500000	DEVELOP APPLICATION	375
7	Phase	600000	IMPLEMENTATION PHASE	56
8	Phase	080000	POST IMPLEMENTATION SUPPORT	25
9				802

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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:	23,228	23,692	24,166	24,649	25,142	25,645	146,522
Costs:							
Development Services Subtotal:	132,330	4,950	4,950	4,950	4,950	4,950	157,080
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	23,228	23,692	24,166	24,649	25,142	25,645	146,522
Annual Total Costs	132,330	4,950	4,950	4,950	4,950	4,950	157,080
Annual Return on Investment	(109,102)	18,742	19,216	19,699	20,192	20,695	(10,558)
Annual Costs/Savings Ratio	569.71%	20.89%	20.48%	20.08%	19.69%	19.30%	
Project Cumulative Statistics:							
Cumulative Total Savings	23,228	46,920	71,085	95,735	120,877	146,522	146,522
Cumulative Total Costs	132,330	137,280	142,230	147,180	152,130	157,080	157,080
Cumulative Return on Investment	(109,102)	(90,360)	(71,145)	(51,445)	(31,253)	(10,558)	(10,558)
Cumulative Cost/Savings Ratio	569.71%	292.59%	200.08%	153.74%	125.86%	107.21%	107.21%
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:	_____		

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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
Reducing the amount of time Land description staff will spend to notify each CVT.	Cost Avoidance	x	x	x	x	x	x	2,734.10	2,788.78	2,844.55	2,901.45	2,959.47	3,018.66
Improve user experience by reducing the time and effort spent by CVTs in getting new Parcel Identification Numbers (PINS).	Cost Avoidance	x	x	x	x	x	x	20,493.41	20,903.28	21,321.34	21,747.77	22,182.72	22,626.38
Improve documentation submission and verification process	Intangible Benefit												
Eliminate inefficiencies in the current manual process	Intangible Benefit												

Oakland County -- Equalization Property Split Workflow
Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
<i>Tangible Benefits Subtotal:</i>							
Cost Avoidance:							
Reducing the amount of time Land description staff will spend to notify each CVT.	2,734	2,789	2,845	2,901	2,959	3,019	17,247
Improve user experience by reducing the time and effort spent by CVTs in getting new Parcel Identification Numbers (PINS).	20,493	20,903	21,321	21,748	22,183	22,626	129,275
<i>Cost Avoidance Subtotal:</i>	23,228	23,692	24,166	24,649	25,142	25,645	146,522
Intangible Benefit:							
Improve documentation submission and verification process							
Eliminate inefficiencies in the current manual process							
Savings Total:	23,228	23,692	24,166	24,649	25,142	25,645	146,522

Oakland County -- Equalization Property Split Workflow
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			802	165	132,330		x							
IT Hours - System Maintenance	Development Svcs			10	165	1,650			x	x	x	x	x	x	
IT Hours - Customer Support	Development Svcs			20	165	3,300			x	x	x	x	x	x	
IT Hours - Planned Maintenance	Development Svcs				165	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									
File Space (100GB)	Hardware		ANN		173	0									
Internet Bandwidth per MB	Hardware		ANN		750	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	
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure				24,533	0								
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure				20,759	0								
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure				16,985	0								
SQL Server Enterprise - Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure				4,218	0								
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure				6,398	0								
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure				5,414	0								
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure				4,429	0								
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure				1,100	0								
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				3,506	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	
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								
Internet Access	Infrastructure				180	0								
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure		ANN		500	0								
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure		ANN		415	0								
Database (5 GB) on Consolidated SQL Instance Server	Infrastructure		ANN		930	0								
Database Instance (125 GB DB) on Consolidated SQL Server	Infrastructure		ANN		2,395	0								
Database SQL Maint Server	Infrastructure		ANN		834	0								
Database SQL Server Physical	Infrastructure		ANN		19,158	0								
DB Maintenance (Annual Cycle \$610)	Infrastructure		ANN		610	0								
DB Maintenance (Semi-Annual Cycle \$1220)	Infrastructure		ANN		1,220	0								
DB Maintenance (Semi-Annual Cycle \$2440)	Infrastructure		ANN		2,440	0								
Dedicated Virtual Server	Infrastructure		ANN		4,150	0								
DB Instance Setup	Infrastructure				976	0								
DBA MS SQL Database Creation on Existing Instance	Infrastructure				366	0								
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$601 On Premise Physical Server = N/A	Infrastructure		ANN			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		
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$9,288	Infrastructure		ANN			0									
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$9,751	Infrastructure		ANN			0									
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$3,167 On Premise Physical Server = \$10,446	Infrastructure		ANN			0									
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$12,906	Infrastructure		ANN			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	132,330.00					
IT Hours - System Maintenance	Development Svcs		1,650.00	1,650.00	1,650.00	1,650.00	1,650.00
IT Hours - Customer Support	Development Svcs		3,300.00	3,300.00	3,300.00	3,300.00	3,300.00
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						
File Space (100GB)	Hardware						
Internet Bandwidth per MB	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
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						

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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
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						
Internet Access	Infrastructure						
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure						
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure						
Database (5 GB) on Consolidated SQL Instance Server	Infrastructure						
Database Instance (125 GB DB) on Consolidated SQL Server	Infrastructure						
Database SQL Maint Server	Infrastructure						
Database SQL Server Physical	Infrastructure						
DB Maintenance (Annual Cycle \$610)	Infrastructure						
DB Maintenance (Semi-Annual Cycle \$1220)	Infrastructure						
DB Maintenance (Semi-Annual Cycle \$2440)	Infrastructure						
Dedicated Virtual Server	Infrastructure						
DB Instance Setup	Infrastructure						
DBA MS SQL Database Creation on Existing Instance	Infrastructure						
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$601 On Premise Physical Server = N/A	Infrastructure						

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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$9,288	Infrastructure						
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$9,751	Infrastructure						
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$3,167 On Premise Physical Server = \$10,446	Infrastructure						
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$12,906	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	132,330						132,330
IT Hours - System Maintenance		1,650	1,650	1,650	1,650	1,650	8,250
IT Hours - Customer Support		3,300	3,300	3,300	3,300	3,300	16,500
IT Hours - Planned Maintenance							
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
<i>Development Services Subtotal:</i>	132,330	4,950	4,950	4,950	4,950	4,950	157,080
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:	132,330	4,950	4,950	4,950	4,950	4,950	157,080

