Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Mobile Assessment Data Collection   **Project ID: D91125DC**

Leadership Group: Land		
Department: Equalization		**Division:** Management & Budget
Project Sponsor: David Hieber	**Date Requested: 3/9/20**	**PM Customer No.** 125
Request Type: ***New Development X*** ***Enhancement*** ***Customer Support*** ***Planned System Maintenance or Upgrade***		
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 X**	**Mandate?** **Yes** **No X** **Mandate Source:**	

Project Goal

To integrate mobile devices with BSA assessment data collection software for the Equalization contracted appraisal units so that field appraising can be completed at the property site electronically, saving time with data input, reduce errors and improving accuracy with parcel sketching projects.

Business Objective

To save time in the field with having electronic devices to collect data electronically instead of recording the information on a record card and bringing back to the office for data entry. To eliminate the errors and the duplication of sketching in the field by the appraiser and then again once entered in the CAMA system by the clerical staff. To take on more contracted units because it will take less time to do mini appraisals.

Major Deliverables

- Detailed Project Plan
- Application and/or System Requirements
- End User Hardware and Software Requirements Document
- 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

Project Name: Mobile Assessment Data Collection   **Project ID: D91125DC**

Approach

- Develop Detailed Project Plan
- 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
- Order hardware and software if needed
- 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 yielded no results

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users   71

Divisions   Equalization

Leadership Groups Land

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Risk

Business Environment   High - Project will dramatically change existing business processes or will negatively affect the business environment if implementation is unsuccessful.

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.

Equalization Staffing: clerical and appraiser staff will be available as needed.

Role:	Name	Hours per Day
Project Sponsor:	Dave Hieber	6:30am – 3:00pm

Facilities

- N/A

Technical

- The BS&A Appraisal software would be used for source assessing data. Integration with BSA either by API or exports and imports

Funding

- Information Technology

Other

- The vendor Pivot Point will be contracted by BSA to be the field data collection vendor for the Assessing Software.

Priority

- TBD

Project Name: Mobile Assessment Data Collection   **Project ID: D91125DC**

Constraints

- .

Exclusions

-

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Project Name: Mobile Assessment Data Collection   **Project ID: D91125DC**

PROJECT PHASE AUTHORIZATION

Phase(s): All		
Total Estimated Application Services	**Hours:** 721	
Total Estimated Technical Systems	**Hours:** 60	
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:** 781	
Preliminary Estimated Development for Future Phases	**Hours:**	
Grand Total Estimated Development	**Hours: 781**	**Cost:** 128,865

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PROJECT COMPLETION AUTHORIZATION

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

Mobile Assessment Data Collection - Size Estimate (+/- 10% to 50%)

	Type	ID	Task Name	Estimated
1				
2				Hours
3	3	000000	PROJECT MANAGEMENT	282
4	Phase	100000	REVIEW VENDOR BUSINESS REQUIREMENTS	66
5	Phase	300000	DESIGN SYSTEM ARCHITECTURE	71
6	Phase	400000	IMPLEMENT VENDOR APPLICATION	276
7	Phase	500000	IMPLEMENTATION PHASE	68
8	Phase	600000	POST IMPLEMENTATION SUPPORT	18
9				781

Oakland County -- Mobile Assessment Data Collection

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:	157,740	159,317	160,911	162,520	164,145	165,786	970,419
Costs:							
Development Services Subtotal:	128,865	19,998	20,198	20,400	20,604	20,810	230,875
Hardware Subtotal:	12,600	6,480	6,480	6,480	6,480	6,480	45,000
Software Subtotal:	82,438	64,759	65,407	66,061	66,722	67,389	412,776
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	157,740	159,317	160,911	162,520	164,145	165,786	970,419
Annual Total Costs	223,903	91,237	92,085	92,941	93,806	94,679	688,651
Annual Return on Investment	(66,163)	68,080	68,826	69,579	70,339	71,107	281,768
Annual Costs/Savings Ratio	141.94%	57.27%	57.23%	57.19%	57.15%	57.11%	
Project Cumulative Statistics:							
Cumulative Total Savings	157,740	317,057	477,968	640,488	804,633	970,419	970,419
Cumulative Total Costs	223,903	315,140	407,225	500,166	593,972	688,651	688,651
Cumulative Return on Investment	(66,163)	1,917	70,743	140,321	210,661	281,768	281,768
Cumulative Cost/Savings Ratio	141.94%	99.40%	85.20%	78.09%	73.82%	70.96%	70.96%
Year Positive Payback Achieved		Year 2					Year 2
State or Federal Mandate?							
Signatures:							
Benefits Reviewed By Project Sponsor				Date:			
Costs (including IT Resources) Reviewed By Information Technology Project Manager				Date:			

Oakland County -- Mobile Assessment Data Collection

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 the amount of time Equalization staff will spend to redraw sketches	Cost Avoidance		ANN	1,536	44	67,584	1.010
Reduce the amount of time Equalization clerical will spend to enter data into the BSA Assessment system.	Cost Avoidance		ANN	2,049	44	90,156	1.010
Eliminate inefficiences in the current process. Data becomes more immediately available.	Intangible Benefit					0	
Improved yearly reporting and processing deadlines. Data will be more immediately available and reports can be genereated as needed.	Intangible Benefit					0	
						0	
						0	
						0	
						0	
						0	
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						0	
						0	

Oakland County -- Mobile Assessment Data Collection

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 the amount of time Equalization staff will spend to redraw sketches	Cost Avoidance	x	x	x	x	x	x	67,584.00	68,259.84	68,942.44	69,631.86	70,328.18	71,031
Reduce the amount of time Equalization clerical will spend to enter data into the BSA Assessment system.	Cost Avoidance	x	x	x	x	x	x	90,156.00	91,057.56	91,968.14	92,887.82	93,816.70	94,755
Eliminate inefficiences in the current process. Data becomes more immediately available.	Intangible Benefit												
Improved yearly reporting and processing deadlines. Data will be more immediately available and reports can be genereated as needed.	Intangible Benefit												

Oakland County -- Mobile Assessment Data Collection

Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
Tangible Benefits Subtotal:							
Cost Avoidance:							
Reduce the amount of time Equalization staff will spend to redraw sketches	67,584	68,260	68,942	69,632	70,328	71,031	415,778
Reduce the amount of time Equalization clerical will spend to enter data into the BSA Assessment system.	90,156	91,058	91,968	92,888	93,817	94,755	554,641
Cost Avoidance Subtotal:	*157,740*	*159,317*	*160,911*	*162,520*	*164,145*	*165,786*	*970,419*
Intangible Benefit:							
Eliminate inefficiencies in the current process. Data becomes more immediately available.							
Improved yearly reporting and processing deadlines. Data will be more immediately available and reports can be genereated as needed.							
Savings Total:	*157,740*	*159,317*	*160,911*	*162,520*	*164,145*	*165,786*	*970,419*

Oakland County -- Mobile Assessment Data Collection

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	Y1	Y2	Y3	Y4	Y5	Y6
								Affects Project ROI?					
IT Hours - New Development	Development Svcs			781	165	128,865		x					
IT Hours - System Maintenance	Development Svcs			40	165	6,600	1.010		x	x	x	x	x
IT Hours - Customer Support	Development Svcs			80	165	13,200	1.010		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				687	0							
PC System - Maintenance	Hardware				2,936	0							
iPad - Acquisition	Hardware			30	420	12,600		x					
iPad- Maintenance	Hardware			30	216	6,480			x	x	x	x	x
Tablet Notebook - Acquisition	Hardware				1,421	0							
Tablet Notebook - Maintenance	Hardware				2,800	0							
Laserprinter - Acquisition	Hardware				1,432	0							
Laserprinter - Maintenance	Hardware				1,408	0							
PC Maintenance User Owned	Hardware				2,720	0							
Printer Maintenance User Owned	Hardware				1,264	0							
File Space (100GB)	Hardware		ANN		23	0							
Package Software - Acquisition	Software		ANN	183,195	0.45	82,438	1.010	x					
Package Software - Maintenance	Software		ANN	183,195	0.35	64,118	1.010		x	x	x	x	x
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 -- Mobile Assessment Data Collection

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
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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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
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 Exisitng 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							

Oakland County -- Mobile Assessment Data Collection

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
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							

Oakland County -- Mobile Assessment Data Collection

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	128,865.00					
IT Hours - System Maintenance	Development Svcs		6,666.00	6,732.66	6,799.99	6,867.99	6,936.67
IT Hours - Customer Support	Development Svcs		13,332.00	13,465.32	13,599.97	13,735.97	13,873.33
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						
iPad - Acquisition	Hardware	12,600.00					
iPad- Maintenance	Hardware		6,480.00	6,480.00	6,480.00	6,480.00	6,480.00
Tablet Notebook - Acquisition	Hardware						
Tablet Notebook - Maintenance	Hardware						
Laserprinter - Acquisition	Hardware						
Laserprinter - Maintenance	Hardware						
PC Maintenance User Owned	Hardware						
Printer Maintenance User Owned	Hardware						
File Space (100GB)	Hardware						
Package Software - Acquisition	Software	82,437.75					
Package Software - Maintenance	Software		64,759.43	65,407.03	66,061.10	66,721.71	67,388.93
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 -- Mobile Assessment Data Collection

Return on Investment Analysis

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						

Oakland County -- Mobile Assessment Data Collection

Return on Investment Analysis

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 Exisitng Instance	Infrastructure						
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = N/A	Infrastructure						

Oakland County -- Mobile Assessment Data Collection

Return on Investment Analysis

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						

Oakland County -- Mobile Assessment Data Collection

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	128,865						128,865
IT Hours - System Maintenance		6,666	6,733	6,800	6,868	6,937	34,003
IT Hours - Customer Support		13,332	13,465	13,600	13,736	13,873	68,007
IT Hours - Planned Maintenance							
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
Development Services Subtotal:	*128,865*	*19,998*	*20,198*	*20,400*	*20,604*	*20,810*	*230,875*
Hardware:							
iPad - Acquisition	12,600						12,600
iPad- Maintenance		6,480	6,480	6,480	6,480	6,480	32,400
Hardware Subtotal:	*12,600*	*6,480*	*6,480*	*6,480*	*6,480*	*6,480*	*45,000*
Software:							
Package Software - Acquisition							
Package Software - Maintenance	82,438	64,759	65,407	66,061	66,722	67,389	412,776
Software Subtotal:	*82,438*	*64,759*	*65,407*	*66,061*	*66,722*	*67,389*	*412,776*
Infrastructure:							
Infrastructure Subtotal							
Training:							
Training Subtotal:							
Other:							

Return on Investment Analysis

Cost Summary

	Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
	Other Subtotal:							
Costs Total:		**223,903**	**91,237**	**92,085**	**92,941**	**93,806**	**94,679**	**688,651**

Oakland County -- Mobile Assessment Data Collection

Return on Investment Analysis

Assumptions

Date	Assumption Description
22-Mar-20	Assume software pricing as an annual license fee (software as a service). We used PivotPoint pricing as a guide: $.35 per parcel per year based on the total number of parcels in the unit that will be used in the application. A one time setup fee of $.10 per parcel. Support and training are included in the $.35 cost. There are no per seat/device restrictions. Includes access to the vendors website for admin and manager functions. Equalization currently has 182,243 residential parcels x .35 = 63,785 + 182,243 x setup .10 = 18, 224 = 82,009
22-Mar-20	Reduce the amount of time Equalization staff will spend to redraw sketches: 12,000 sketches x .15min each sketch 1,800/60 = 30hrs x $21.68 Equalization Clerk rate = $650 a week x 52 = 33,800 (2 clerks)
22-Mar-20	Reduce the amount of time Equalization clerical will spend to enter data into the BSA Assessment system: 16,000 record cards at x .15 min. each record card 2400/60 = 40hrs x $21.68 Equalization Clerk rate = $867 a week x 52 = 45,094 (2 Clerks)
15-Jun-20	Software will reside on existing BSA servers; additional servers will not need to be built.