Project Name: BS&A Development Budget 2021-2022 Project ID: D91182DB

Leadership Group: Land	I									
Department: Information	Technology		Division: Appl	ication Services						
Project Sponsor: Tamm	Shepherd	Date Requ	ested: 3/9/2020	PM Custom	er No. 182					
Request Type:	New Develop	oment X	Enhancem	ent Cus	stomer Support					
	Planned System Maintenance or Upgrade									
IT Team Name: Assessin	g and Taxatior	1	IT Team No: 9							
Project Manager/Leader	: Wendy Conkl	lin								
Account Number: 50000	Account Description:	BS&A A	nnual Process	Customer Name:	Application Services					
Grant Funded? Yes	No X		Mandate?	Yes	No X					
			Mandate Source:							

Project Goal

To implement enterprise enhancements and apply BS&A database processes, so that new application functionality can be leveraged to gain efficiency in the Equalization, Treasurer and Local Municipality Offices and databases are created for the 2021 & 2022 assessment and tax calendar years.

Business Objective

To implement non-customer specific enterprise enhancements that will provide participating local units and county departments increased functionality.

To implement process improvements and technology updates which will result in more efficient delivery of system support and maintenance.

To administer unscheduled updates and annual processes to ensure that the data and utilities are processed in a standard format by the database administrators in a timely fashion following the State Tax Commission Property Tax, Collections and Equalization calendar.

To create BSA production databases (Tax, Assessing, MYSA, PREA Countywide, Equalization Samples, Commercial Sales and Equalization Personal Property Audit) and then updated throughout the calendar year with processes that are needed by the database users to produce reports and information data backups for the State Tax Commission, County Treasurer, Equalization and Local Municipalities.

Project Name: BS&A Development Budget 2021-2022 Project ID: D91182DB

Major Deliverables

- System enhancements
- Annual database rollover
- Addition/Deletion of user accounts
- Add / Remove local units from the application
- New or updated enterprise reports
- Administrative Utilities Performed
- Optimize/Automate BS&A database processes
- Export & Import Improvements
- External process Improvements

Approach

- Determine, document and implement enterprise application enhancements and improvements to internal or external processes.
- Perform end of year roll-over for each database
- Create Change Orders to add / remove user accounts
- Follow process to add a new CVT or remove a CVT from the database
- Review current annual processes and requirements for potential improvements
- Perform administrative utilities
- Research new collaboration opportunities, and evaluate their value
- Release new processes, system/data into production

Research & Analysis

Gartner Research Recommendation

Research Conducted - Nothing found

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users <500

Divisions Equalization, Treasurer, Local Units

Leadership Groups Land

Project Name: BS&A Development Budget 2021-2022 Project ID: D91182DB

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 per the attached project plan.

Other Staffing: additional staffing will be available as follows: Equalization staff and Local Units will be available for testing and review as needed throughout the project plan.

Facilities

N/A

Technical

N/A

Funding

Information Technology

Other

N/A

Priority

TBD

Constraints

N/A

Exclusions

N/A

Project Name: BS&A Development Budget 2021-2022 Project ID: D91182DB

PROJECT PHASE AUTHORIZATION

Phase(s): All		
Total Estimated Application Services	Hours: 1,622	
Total Estimated Technical Systems	Hours: 24	
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

Hours: 1,646
Hours:
Hours: 1,646 Cost: 271,590
•

Project Name: BS&A Development Budget 2021-2022 Project ID: D91182DB

PROJECT COMPLETION AUTHORIZATION

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

BS&A Development Budget 2021-2022 - Size Estimate (+/- 10% to 50%)

1	Type	ID	Task Name	Estimated	Estimate Notes
2				Hours	
3	Phase	000000	BS&A DEVELOPMENT BUDGET 2020-2021	1,496	
4	Phase	100000	PROJECT MANAGEMENT		
5	Phase	200000	2021 BSA DEVELOPMENT BUDGET SYSTEM ENHANCEMENTS		
6	Phase	300000	2021 BSA ADMINISTRATIVE UTILITIES		
7	Phase	400000	2021 BSA YEAR END ROLLOVER BUDGET		
8	Phase	500000	2022 BSA DEVELOPMENT BUDGET SYSTEM ENHANCEMENTS		
9	Phase	600000	2022 BSA ADMINISTRATIVE UTILITIES		
10	Phase	700000	2022 BSA YEAR END ROLLOVER BUDGET	150	
11				1,646	

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:	1,750	3,501	3,536	3,571	3,607	3,643	19,607
Costs:							
Development Services Subtotal:	271,590	271,590	33,825	33,825	33,825	33,825	678,480
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	2,000	0	0	0	0	0	2,000
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	1,750	3,501	3,536	3,571	3,607	3,643	19,607
Annual Total Costs	273,590	271,590	33,825	33,825	33,825	33,825	680,480
Annual Return on Investment	(271,840)	(268,089)	(30,289)	(30,254)	(30,218)	(30,182)	(660,873)
Annual Costs/Savings Ratio	15633.71%	7758.25%	956.68%	947.21%	937.83%	928.54%	(000,010)
Project Cumulative Statistics:							
Cumulative Total Savings	1,750	5,251	8,786	12,357	15,964	19,607	19,607
Cumulative Total Costs	273,590	545,180	579,005	612,830	646,655	680,480	680,480
Cumulative Return on Investment	(271,840)	(539,929)	(570,219)	(600,473)	(630,691)	(660,873)	(660,873)
Cumulative Cost/Savings Ratio	15633.71%	10383.08%	6589.84%	4959.23%	4050.69%	3470.62%	3470.62%
V 5 % 5 1 1 1 1 1							
Year Positive Payback Achieved							NO PAYBACK
State or Federal Mandate?							
Signatures:							
Panafita Daviawad By Prainat Spanaar				Date:			
Benefits Reviewed By Project Sponsor				Date.			
Contraction IT Decreases Decreases							
Costs (including IT Resources) Reviewed By Information Technology Project Manager				Date:			
<u> </u>							

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
Benefit/Savings Description	Category	Budget Category/Funding Source	Desc	Units	Unit	Total Savings	Multiplier
Enhance existing BSA custom							
developed applications and provide							
additional functionality and time saving							
features to all supported applications.	Intangible Benefit		ANN			0	1.010
reatures to air supported applications.	Intangible beliefit		AININ			0	1.010
Provide enhancements to IT processes							
that result in reduced cost of ownership							
for the BSA applications.	Intangible Benefit		ANN			0	1.010
Implement new functionality available in	Thangible Benefit		""			, and the second	1.010
latest vendor release	Intangible Benefit		ANN			0	1.010
Provide security enhancements for a	intangiale Zenem						
more secure system and better user							
experience.	Intangible Benefit		ANN			0	1.010
Implement new data collection card.							
Reduce the amount of time clerical staff							
will spend to manually write up the							
additional fields that are not on the							
record card	Cost Avoidance		HR	78	22	1,716	1.010
Implement ACH/ePayments for Local							
Municipalities. Reduce the amount of							
time for treasurer staff to process							
payments at the counter.	Cost Avoidance		HR	125	14	1,750	1.010
						0	
						0	
						0	
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						0	

Savings Detail

Benefit/Savings Description	Project Savings Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	

Return on Investment Analysis

Savings Detail

		Af	fec	ts P	roje	ect	RC	OI?	I? Potential Savings Extensions					
Benefit/Savings Description	Project Savings Category	V1	V2	Va	, V	<u>ر</u> ا	7 5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
Belletit/Savings Description	Category	┿	! 12	. ; T v	+	 -	=		''	12	13	1.7	13	
Enhance existing BSA custom					İ	İ	i							
developed applications and provide			-			ļ								
additional functionality and time saving			!	1		ļ	į	į						
features to all supported applications.	Intangible Benefit	x	х	1	İ	į	ı	ĺ	0.00	0.00				
reatures to an supported applications.	Intangible benefit		<u> </u> ^-	+	╁	╁	⊣		0.00	0.00				
Provide enhancements to IT processes														
that result in reduced cost of ownership			•			İ	İ							
for the BSA applications.	Intangible Benefit	x	х		İ	İ	Ì		0.00	0.00				
Implement new functionality available in	Intangible Bonom		 ^_	+	+	+	-		0.00	0.00				
latest vendor release	Intangible Benefit	x	x				- }	į	0.00	0.00				
Provide security enhancements for a		1	Ť	†	i	i	一		3.30	3.30				
more secure system and better user			-	-		ł		ĺ						
experience.	Intangible Benefit	x	x			-			0.00	0.00				
Implement new data collection card.			İ	1	†	1								
Reduce the amount of time clerical staff				-	-	Ì	- 1							
will spend to manually write up the			-	-	-	ļ	-	•						
additional fields that are not on the						į		İ						
record card	Cost Avoidance		х	х	x	x	:	х		1,733.16	1,750.49	1,768.00	1,785.68	1,804
Implement ACH/ePayments for Local			1					1						
Municipalities. Reduce the amount of			-		-	- 1	- 1	İ						
time for treasurer staff to process			-	1	İ	İ	İ	ĺ						
payments at the counter.	Cost Avoidance	х	x	х	x	x		x	1,750.00	1,767.50	1,785.18	1,803.03	1,821.06	1,839
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Savings Detail

	Duningt Sovings	Affects Project ROI?					Potential Savings Extensions							
Benefit/Savings Description	Project Savings Category	Y1	Y2	Y:	3 Y	4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
				1	+	-	_				<u> </u>			
				-	+									
				+	+	+								
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			!	1	1	i	1	!		!	!	!	!	! !

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:							
Tangara Zanama dazatan							
Cost Avoidance:							
Implement new data collection card. Reduce							
the amount of time clerical staff will spend to							
manually write up the additional fields that				4 =00	4 = 0.0		
are not on the record card		1,733	1,750	1,768	1,786	1,804	8,841
Implement ACH/ePayments for Local Municipalities. Reduce the amount of time							
for treasurer staff to process payments at							
the counter.	1,750	1,768	1,785	1,803	1,821	1,839	10,766
uno counter.	1,700	1,700	1,700	1,000	1,021	1,000	10,700
Ocat Assistance Ochtetel	4 == 0	0.504	0.700	0.554			10.00=
Cost Avoidance Subtotal:	1,750	3,501	3,536	3,571	3,607	3,643	19,607
Intangible Benefit:							
Enhance existing BSA custom developed							
applications and provide additional						1	
functionality and time saving features to all						1	
supported applications.	0	0					
Provide enhancements to IT processes that							
result in reduced cost of ownership for the							
BSA applications.	0	0					

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Implement new functionality available in latest vendor release	0	0					
Provide security enhancements for a more secure system and better user experience.	0	0					
Savings Total:	1,750	3,501	3,536	3,571	3,607	3,643	19,607

REV: May 21, 2018

Return on Investment Analysis

Cost Detail

								Af	fects	s Pr	ojec	t RO	OI?
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual						
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs		HR	1,646	165	271,590		Х	Х				
IT Hours - System Maintenance	Development Svcs				165	0							
IT Hours - Customer Support	Development Svcs		ANN	205	165	33,825				Х	Х	x	х
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							į
PC System - Maintenance	Hardware				2,936	0							
Notebook - Acquisition	Hardware				1,115	0							
Notebook - Maintenance	Hardware				3,024	0							
Tablet Notebook - Acquisition	Hardware				1,421	0							
Tablet Notebook - Maintenance	Hardware				2,800	0							
Laser printer - Acquisition	Hardware				1,432	0							
Laser printer - 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					0							
Package Software - Customization	Software		EA	2	1,000	2,000		х					
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							

Return on Investment Analysis

Cost Detail

								Aff	ects	Pro	ject	ROI?
Cost Description	Project Cost	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	VA	va	Va	v.	Y5 Y6
-	Category	Source	Desc	Ullits	Unit	TOTAL COST	widitiplier	111	12	13	14;	15;16
SQL Server Enterprise - Per Processor								li	İ	İ	- 1	Ì
(4 cores) - Purchased Sept 2016-Aug									- 1	-	- 1	
2017 - Includes Maintenance thru Aug						_			- 1	-		ļ
2019	Infrastructure				24,533	0				}	_	
SQL Server Enterprise - Per Processor								l		İ		- 1
(4 cores) - Purchased Sept 2017-Aug								l		İ		į
2018 - Includes Maintenance thru Aug									i	İ	- 1	İ
2019	Infrastructure				20,759	0		l i		- 1	_ [
SQL Server Enterprise - Per Processor									- 1	-	- 1	
(4 cores) - Purchased Sept 2018-Aug									- 1	-	- 1	-
2019 - Includes Maintenance thru Aug												
2019	Infrastructure				16,985	0						
SQL Server Enterprise - Maintenance,								li		İ		į
Per Processor (4 cores) - Sept 2019								li	ı	İ	- 1	İ
and Beyond	Infrastructure				4,218	0						
SQL Server Standard - Per Processor									- 1	-		
(4 cores) - Purchased Sept 2016-Aug												
2017 - Includes Maintenance thru Aug										į		
2019	Infrastructure				6,398	0						
SQL Server Standard - Per Processor										- 1		
(4 cores) - Purchased Sept 2017-Aug								li		- 1		- 1
2018 - Includes Maintenance thru Aug									- 1			- 1
2019	Infrastructure				5,414	0				-		
SQL Server Standard - Per Processor												
(4 cores) - Purchased Sept 2018-Aug								li		İ		İ
2019 - Includes Maintenance thru Aug								li	İ	- 1		Ì
2019	Infrastructure				4,429	0				- 1		- 1
SQL Server - Standard Maintenance,										- 1		
Per Processor (4 cores) - Sept 2019									- 1	-		ļ
and Beyond	Infrastructure				1,100	0				}		
Websphere Basic Per Processor										-		
Single/Dual Core - Includes Year 1										į	İ	İ
Maintenance	Infrastructure				3,506	0			ĺ	-		

Return on Investment Analysis

Cost Detail

										Affects Proje		ROI?
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual			,		
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3	Y4 Y	/5 Y6
Websphere Basic Per Processor								li				
Single/Dual Core - Year 2 and Beyond	Infrastructure				701	0		Li			i_	
Websphere ND Per Processor										,	İ	
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				. !	ļ	
	Infrastructure				845	0					-	
	Infrastructure				180	0		Hi			-	-
Imperva Web Application Firewall	illinaotraotaro				100	•				\Box	-	
• •	Infrastructure		ANN		500	0						
App Code Directories on Consolidated	illinaoti aotaro		" " " "		000	•					-	
	Infrastructure		ANN		415	0		li		ıİ	İ	
Database (5 GB) on Consolidated SQL												- [
	Infrastructure		ANN		930	0					į	
Database Instance (125 GB DB) on											i	
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												
· · · · /	Infrastructure		ANN		2,440	0		li		ıİ		
Dedicated Virtual Server	Infrastructure		ANN		4,150	0		li		. [
l l	Infrastructure				976	0						
DBA MS SQL Database Creation on												
3	Infrastructure				366	0						
Extra Small - 2 Core 8GB RAM, 500GB												
Drive, 10 GB NIC - Cloud/Virtual =										ı İ		
\$601 On Premise Physical Server =										į į		
N/A	Infrastructure		ANN			0						

Return on Investment Analysis

Cost Detail

								Af	ect	s Pr	ojec	t RC) ?
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual					ŀ	
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3	Y4	Y5	Y6
Small - 4 Core 16GB RAM, 500GB												ŀ	
Drive, 10 GB NIC - Cloud/Virtual =												ļ	
\$951 On Premise Physical Server =													
\$9,288	Infrastructure		ANN			0						į	
Medium - 8 Core 32GB RAM, 500GB													
Drive, 10 GB NIC - Cloud/Virtual =													
\$1,702 On Premise Physical Server =												ŀ	
\$9,751	Infrastructure		ANN			0							
Large - 16 Core 64GB RAM, 500GB								l				i	
Drive, 10 GB NIC - Cloud/Virtual =												į	
\$3,167 On Premise Physical Server =												-	
\$10,446	Infrastructure		ANN			0							
Extra Large - 40 Core 160GB RAM,													
500GB Drive, 10 GB NIC -												İ	
Cloud/Virtual = \$7,564 On Premise												į	
Physical Server = \$12,906	Infrastructure		ANN			0						į	

Return on Investment Analysis

Cost Detail

			Po	tential Cost	Extensions		
	Project Cost						
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs	271,590.00	271,590.00				
IT Hours - System Maintenance	Development Svcs						
IT Hours - Customer Support	Development Svcs			33,825.00	33,825.00	33,825.00	33,825.00
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						
Laser printer - Acquisition	Hardware						
Laser printer - Maintenance	Hardware		l				
PC Maintenance User Owned	Hardware						
Printer Maintenance User Owned	Hardware						
File Space (100GB)	Hardware						
Package Software - Acquisition	Software						
Package Software - Customization	Software	2,000.00					
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						

Return on Investment Analysis

Cost Detail

		Potential Cost Extensions							
	Project Cost		!	!	ļ	!			
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6		
SQL Server Enterprise - Per Processor			-	1	!	!	-		
(4 cores) - Purchased Sept 2016-Aug			!		•	!	!		
2017 - Includes Maintenance thru Aug									
2019	Infrastructure								
SQL Server Enterprise - Per Processor						ļ	•		
(4 cores) - Purchased Sept 2017-Aug									
2018 - Includes Maintenance thru Aug						ļ			
2019	Infrastructure								
SQL Server Enterprise - Per Processor						<u> </u>			
(4 cores) - Purchased Sept 2018-Aug			İ	İ	İ	İ			
2019 - Includes Maintenance thru Aug					İ	•			
2019	Infrastructure								
SQL Server Enterprise - Maintenance,							ļ		
Per Processor (4 cores) - Sept 2019						•			
and Beyond	Infrastructure		İ		İ				
SQL Server Standard - Per Processor									
(4 cores) - Purchased Sept 2016-Aug									
2017 - Includes Maintenance thru Aug						<u> </u>	•		
2019	Infrastructure								
SQL Server Standard - Per Processor			1						
(4 cores) - Purchased Sept 2017-Aug			İ		İ	İ	•		
2018 - Includes Maintenance thru Aug						-			
2019	Infrastructure		!		•	!			
SQL Server Standard - Per Processor									
(4 cores) - Purchased Sept 2018-Aug				İ	İ	į	•		
2019 - Includes Maintenance thru Aug					İ	į			
2019	Infrastructure								
SQL Server - Standard Maintenance,						İ			
Per Processor (4 cores) - Sept 2019			İ		İ	İ			
and Beyond	Infrastructure		<u> </u>	<u> </u>					
Websphere Basic Per Processor					ļ	<u> </u>			
Single/Dual Core - Includes Year 1						!			
Maintenance	Infrastructure		<u> </u>	<u> </u>	<u> </u>	<u> </u>			

Return on Investment Analysis

Cost Detail

		Potential Cost Extensions									
	Project Cost		1	!	!	!	İ				
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6				
			i	-	!		-				
Websphere Basic Per Processor			-				1				
Single/Dual Core - Year 2 and Beyond	Infrastructure		!								
Websphere ND Per Processor											
Single/Dual Core - Includes Year 1											
Maintenance	Infrastructure				ļ	<u> </u>					
Mahambara ND Day Dysassay				ļ							
Websphere ND Per Processor	lucture atministrations			ļ	•	•	ļ				
Single/Dual Core - Year 2 and Beyond				<u> </u>	<u> </u>	 	<u> </u>				
SSL Certificate	Infrastructure		<u> </u>	<u> </u>	<u> </u>	<u> </u>	İ				
Internet Access	Infrastructure		-								
Imperva Web Application Firewall							1				
(External Web Applications Only)	Infrastructure				ļ	<u> </u>					
App Code Directories on Consolidated											
IIS Server (Virtual)	Infrastructure			ļ	<u> </u>	<u> </u>	<u> </u>				
Database (5 GB) on Consolidated SQL											
Instance Server	Infrastructure					<u> </u>					
Database Instance (125 GB DB) on							}				
Consolidated SQL Server	Infrastructure				<u> </u>	<u> </u>	<u> </u>				
Database SQL Maint Server	Infrastructure				<u> </u>	<u> </u>	<u> </u>				
Database SQL Server Physical	Infrastructure		1	ļ	<u> </u>	ļ	<u> </u>				
DB Maintenance (Annual Cycle \$610)	Infrastructure		1	ļ	ļ	<u> </u>	<u> </u>				
DB Maintenance (Semi-Annual Cycle					-						
\$1220)	Infrastructure				ļ		-				
DB Maintenance (Semi-Annual Cycle				ļ			ļ				
\$2440)	Infrastructure										
Dedicated Virtual Server	Infrastructure										
DB Instance Setup	Infrastructure				<u> </u>	ļ					
DBA MS SQL Database Creation on					1		1				
Existing Instance	Infrastructure					<u> </u>					
Extra Small - 2 Core 8GB RAM, 500GB						-	1				
Drive, 10 GB NIC - Cloud/Virtual =						-	1				
\$601 On Premise Physical Server =				ļ		1	1				
N/A	Infrastructure										

Return on Investment Analysis

Cost Detail

			Po	otential Cos	t Extensions	;	
Cost Description	Project Cost Category	Y1	Y2	Y3	Y4	Y5	Y6
Small - 4 Core 16GB RAM, 500GB				İ	1	ļ	! !
Drive, 10 GB NIC - Cloud/Virtual =						 	
\$951 On Premise Physical Server =				!		<u> </u>	!
\$9,288	Infrastructure			!			
Medium - 8 Core 32GB RAM, 500GB							
Drive, 10 GB NIC - Cloud/Virtual =				İ		į	İ
\$1,702 On Premise Physical Server =							
\$9,751	Infrastructure			•			
Large - 16 Core 64GB RAM, 500GB							
Drive, 10 GB NIC - Cloud/Virtual =				İ	İ	į	İ
\$3,167 On Premise Physical Server =						i ! !	
\$10,446	Infrastructure			!			
Extra Large - 40 Core 160GB RAM,							
500GB Drive, 10 GB NIC -				İ		į	İ
Cloud/Virtual = \$7,564 On Premise				İ			İ
Physical Server = \$12,906	Infrastructure						

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Development Services:							
IT Hours - New Development	271,590	271,590					543,180
IT Hours - System Maintenance							
IT Hours - Customer Support			33,825	33,825	33,825	33,825	135,300
IT Hours - Planned Maintenance							
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
Development Services Subtotal:	271,590	271,590	33,825	33,825	33,825	33,825	678,480
Hardware:		-					
Hardware Subtotal: Software:							
Package Software - Customization	2,000						2,000
							,
Software Subtotal:	2,000						2,000
Infrastructure:							
Infrastructure Subtotal							
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	273,590	271,590	33,825	33,825	33,825	33,825	680,480

Assumptions

Date	Assumption Description
01-May-18	Estimate is based on the 2017 & 2018 Year End Annual Processes Budget projects and includes all tasks.
01-May-18	Estimate includes hours for 12 enhancement tasks for enhancements needed by Local CVTs, Equalization & Treasurer Offices
01-May-18	This development budget will replace the Year End Annual Processes projects and the BS&A EB budget
-	Hours are included for creating, removing and updating user accounts. Hours were averaged from Service Center CO's for 9/2016 -
01-May-18	
	Hours are included for adding or removing 1 CVT from the Oakland County BS&A Assessing and Tax applications per year.
	Reduce the amount of time clerical staff will spend to manually write up the additional fields that are not on the record card. 468 field reviews*10 min. each=4,680/60min=78 hrs*22= \$1,716.
	savings detail=468 units, \$22 rate, \$1,716 total savings.
	Reduce the amount of time local muncipalities will spend to manually process counter payments for taxpayers who want to pay by check (ACH) on-line. Avg. 1,000 ACH payments @ 50% 500 at counter *15 min. each=7,500/60min=125 hrs*14= \$1,750.00.
01-Apr-20	savings detail=500 units, \$14 rate, \$1,750 total savings.