

# Oakland County Department of Information Technology Project Scope and Approach

**Project Name: Citizen Engagement Budget – CLEMIS LG**

**Project ID: DE9183CM**

<b>Leadership Group: IT Steering Committee</b>			
<b>Department: Information Technology</b>		<b>Division: Application Services</b>	
<b>Project Sponsor: Phil Bertolini</b>	<b>Date Requested: 6/5/2018</b>	<b>PM Customer No. 182</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 Services</b>		<b>IT Team No: E</b>	
<b>Project Manager/Leader: Cassy Zakens</b>			
<b>Account Number:</b> TBD	<b>Account Description:</b> TBD	<b>Customer Name:</b>	TBD
<b>Grant Funded?</b> Yes <u>No</u>	<b>Mandate?</b> Yes <u>No</u>	<b>Mandate Source:</b>	

## **Project Goal**

To establish a Citizen Engagement budget for the CLEMIS Leadership Group so that hours may be allocated in support of the development and expansion of Oakland County’s digital media goals and objectives.

## **Business Objective**

To provide a shared citizen engagement budget for digital media Initiatives in support of users, departments, agencies, and eGovernment goals and objectives.

### **Major Deliverables**

- Web Content
  - Posting content
  - Content Training
  - Graphics
  - Citizen
- Citizen Engagement
  - Writing for the web
  - Email Marketing
  - Blogs
  - Video
  - Social Media

### **Approach**

- As a request for citizen engagement digital media channel is approved, the quantities available for each digital asset will be decremented and the work will be scheduled to complete the request

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- The approach for blog, email marketing and video requests will be the same for each leadership group.
- The approach will vary for social media.

## **Research & Analysis**

**Gartner Research Recommendation**      Research Conducted – See recommendation below

Citizens' experience with government services is often "underwhelming," leaving them lacking confidence and trust. Government CIOs leading digital transformation need to establish a citizen experience program with an outside-in approach that meets citizen expectations of digital government services.

Key Findings:

- Government leaders have regularly stated goals of being more citizen-centric or improving the citizen experience. However, unless they're turned into action-oriented strategies, tracked and measured, these goals will not be achieved, which will lead to lower levels of transparency and accountability.
- CX efforts that do not show quantifiable value lose executive support, and often see their funding cut when budgets are tightened.
- Citizen engagement efforts, which are often siloed, frequently fail to produce satisfactory interactions with citizens, leading to a sense of citizen apathy and frustration by government leaders.

Government CIOs leading their organizations in digital transformation should:

- Put citizens at the center of service delivery by following this roadmap to incorporate CX strategies into their digital government strategies.
- Use customer journey maps to identify and prioritize new opportunities for digital services and enterprise wide investments to accelerate their organizations' progress toward implementing digital government.
- Develop CX-focused, digital government key performance indicators across government services that measure digital service effectiveness and drive digital transformation to demonstrate the business value of citizen-centric digital government.

## **Benefits**

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*See Return on Investment (ROI) Analysis Document*

**Impact**

<b>Number of Users</b>	The number of users will vary depending on topic.
<b>Divisions</b>	All or department specific depending on topic.
<b>Leadership Groups</b>	All.

**Risk**

<b>Business Environment</b>	Low – little or no impact to existing business processes
<b>Technical Environment</b>	Low – proven and previously implemented technologies

**Assumptions**

**Staffing**      IT Staffing: resources available for the hours indicated per the attached 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:	Phil Bertolini	As needed

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**Facilities**

- None

**Technical**

- None

**Funding**

- IT

**Other**

- None

**Priority**

- TBD

**Constraints**

- None

**Exclusions**

- None

**Oakland County  
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**PROJECT PHASE AUTHORIZATION**

<b>Phase(s):</b> ALL	
<b>Total Estimated Application Services</b>	<b>Hours: 200</b>
<b>Total Estimated Technical Systems</b>	<b>Hours:</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:            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: 200</b>
<b>Preliminary Estimated Development for Future Phases</b>	<b>Hours:</b>
<b>Grand Total Estimated Development</b>	<b>Hours: 200    Cost: \$33,000</b>

**Oakland County  
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**Project Name: Citizen Engagement Budget – CLEMIS LG**

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**PROJECT COMPLETION AUTHORIZATION**

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

**Citizen Engagement Budget - Courts LG - Size Estimate (+/- 10% to 50%)**

1	Type	ID	Task Name	Estimated	Estimate Notes
2				Hours	
3	<b>3</b>	<b>000000</b>	<b>CITIZEN ENGAGEMENT - COURTS LG</b>		
4	<b>Phase</b>	<b>001000</b>	<b>PROJECT MANAGEMENT - COURTS LG</b>	<b>10</b>	
5	<b>Phase</b>	<b>002000</b>	<b>WEBSITE CONTENT PUBLISHING - COURTS L</b>	<b>40</b>	
6	<b>Phase</b>	<b>003000</b>	<b>CITIZEN ENGAGEMENT - COURTS LG</b>	<b>150</b>	
7				200	

**Oakland County Citizen Engagement Budget - CLEMIS LG**

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:	0	0	0	0	0	0	0
Cost Avoidance Subtotal:	0	0	0	0	0	0	0
<b>Costs:</b>							
Development Services Subtotal:	16,500	16,500	0	0	0	0	33,000
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	0	0	0	0	0	0	0
Annual Total Costs	16,500	16,500	0	0	0	0	33,000
Annual Return on Investment	(16,500)	(16,500)					(33,000)
Annual Costs/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
<b>Project Cumulative Statistics:</b>							
Cumulative Total Savings	0	0	0	0	0	0	0
Cumulative Total Costs	16,500	33,000	33,000	33,000	33,000	33,000	33,000
Cumulative Return on Investment	(16,500)	(33,000)	(33,000)	(33,000)	(33,000)	(33,000)	(33,000)
Cumulative Cost/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Year Positive Payback Achieved							NO PAYBACK
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 Citizen Engagement Budget - CLEMIS LG**

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
Creates a customer service outlet, potentially reducing phone calls and/or other traditional customer service methods.	Intangible Benefit					0	
Helps to improve government service by gaining a better understanding of the needs of the community served.	Intangible Benefit					0	
Enables customers to help one another by interacting with one another, potentially reducing reliance on government resources.	Intangible Benefit					0	
Reaches an increasingly mobile and high-tech audience of all ages.	Intangible Benefit					0	
Enhances quality of life by facilitating local community building by connecting people with one another who may have not had other means to do so.	Intangible Benefit					0	
Further promotes Oakland County's use of emerging technologies to serve its constituencies.	Intangible Benefit					0	
Creates a "sticky" environment that draws/attracts more people to the OakGov.com web site, thereby promoting awareness and conversion to other online services.	Intangible Benefit					0	
Potentially reaches a younger audience and engages them in government early on in order to serve their needs for the future.	Intangible Benefit					0	
Provides a practical way to communicate with Oakland County's retiree population and to improve outreach through Health, Wellness and other program areas.	Intangible Benefit					0	



**Oakland County Citizen Engagement Budget - CLEMIS LG**

Return on Investment Analysis

Savings Detail

<b>Benefit/Savings Description</b>	<b>Project Savings Category</b>	<b>Budget Category/Funding Source</b>	<b>Unit Desc</b>	<b>Units</b>	<b>Rate per Unit</b>	<b>Total Savings</b>	<b>Annual Multiplier</b>
Provides a platform for enterprise and regional collaboration.	Intangible Benefit					0	
Provides an effective way to solicit community input and feedback in support of government transparency.	Intangible Benefit					0	
						0	
						0	
						0	

**Oakland County Citizen Engagement Budget - CLEMIS LG**

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
Creates a customer service outlet, potentially reducing phone calls and/or other traditional customer service methods.	Intangible Benefit												
Helps to improve government service by gaining a better understanding of the needs of the community served.	Intangible Benefit												
Enables customers to help one another by interacting with one another, potentially reducing reliance on government resources.	Intangible Benefit												
Reaches an increasingly mobile and high-tech audience of all ages.	Intangible Benefit												
Enhances quality of life by facilitating local community building by connecting people with one another who may have not had other means to do so.	Intangible Benefit												
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Potentially reaches a younger audience and engages them in government early on in order to serve their needs for the future.	Intangible Benefit												
Provides a practical way to communicate with Oakland County's retiree population and to improve outreach through Health, Wellness and other program areas.	Intangible Benefit												

**Oakland County Citizen Engagement Budget - CLEMIS LG**

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	
Provides a platform for enterprise and regional collaboration.	Intangible Benefit													
Provides an effective way to solicit community input and feedback in support of government transparency.	Intangible Benefit													

**Oakland County Citizen Engagement Budget - CLEMIS LG**

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>							
<i>Tangible Benefits Subtotal:</i>							
<b>Cost Avoidance:</b>							
<i>Cost Avoidance Subtotal:</i>							
<b>Intangible Benefit:</b>							
Creates a customer service outlet, potentially reducing phone calls and/or other traditional customer service methods.							
Helps to improve government service by gaining a better understanding of the needs of the community served.							
Enables customers to help one another by interacting with one another, potentially reducing reliance on government resources.							
Reaches an increasingly mobile and high-tech audience of all ages.							
Enhances quality of life by facilitating local community building by connecting people with one another who may have not had other means to do so.							
Further promotes Oakland County's use of emerging technologies to serve its constituencies.							
Creates a "sticky" environment that draws/attracts more people to the OakGov.com web site, thereby promoting awareness and conversion to other online services.							
Potentially reaches a younger audience and engages them in government early on in order to serve their needs for the future.							

**Oakland County Citizen Engagement Budget - CLEMIS LG**

Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Provides a practical way to communicate with Oakland County's retiree population and to improve outreach through Health, Wellness and other program areas.							
Provides a platform for enterprise and regional collaboration.							
Provides an effective way to solicit community input and feedback in support of government transparency.							
<b>Savings Total:</b>							

**Oakland County Citizen Engagement Budget - CLEMIS LG**  
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 2019	Development Svcs		HR	100	165	16,500		x							
IT Hours - New Development 2020	Development Svcs		HR	100	165	16,500			x						
IT Hours - Customer Support	Development Svcs					0									
IT Hours - Planned Maintenance	Development Svcs					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									

**Oakland County Citizen Engagement Budget - CLEMIS LG**  
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 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									



**Oakland County Citizen Engagement Budget - CLEMIS LG**  
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									
Project Staff Training	Training					0									
User Training	Training					0									

**Oakland County Citizen Engagement Budget - CLEMIS LG**

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development 2019	Development Svcs	16,500					
IT Hours - New Development 2020	Development Svcs		16,500				
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						
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						

**Oakland County Citizen Engagement Budget - CLEMIS LG**

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 Citizen Engagement Budget - CLEMIS LG**  
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 Existing 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 Citizen Engagement Budget - CLEMIS LG**  
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						
Project Staff Training	Training						
User Training	Training						

**Oakland County Citizen Engagement Budget - CLEMIS LG**  
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 2019	16,500						16,500
IT Hours - New Development 2020		16,500					16,500
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>16,500</b>	<b>16,500</b>					<b>33,000</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>16,500</b>	<b>16,500</b>					<b>33,000</b>

