

## Implementation Schedule

The focus of the work in 2017/2018 is upon the following areas:

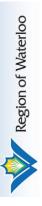
- Introducing more formalized IT Governance policies processes, policies and standards
  - Invest in a cloud-based Business Continuity Management solution RecoveryPlanner
- Revitalizing the Disaster Recovery strategy hire a 3<sup>rd</sup> party firm to assist
- Implement improvements to 150 Frederick datacenter
- Complete server consolidation project hire a 3<sup>rd</sup> party firm to assist
- Network Architecture complete roadmap and documentation
- Implement a Data Archiving strategy purchase software and hosted services

The work plan including estimated costs is detailed in the table below:

<u></u>						2017	2018	Cost Savings/Avoidance
<u> </u>	Project Name	Comments	Who	Effort Days	Budget			
Operations	ions							
IT Governance	nance							
	Initiate work to develop key policies and	Review, revise existing	Region/	20	\$5,000.00			
<u>a</u>	procedures (backup, cloud, security)	and introduce a range of	3 <sup>rd</sup> party			-		
		IT policies						
Business	Business Continuity Management							
Д	Program start-up (RecoveryPlanner)	Leverage a SaaS	Region/	10	\$20,000.00			
		provider of a hosted	3 <sup>rd</sup> party					
		BCM solution prior to				-		
		the revitalization of the						
		DR strategy						

<sup>&</sup>lt;sup>1</sup> The ID's in this table cross reference to the project descriptions in the three-year work plan outlined in the report

Region of Waterloo Draft Budgetary Forecast 2017/2018 – July 10<sup>th</sup>, 2017



						2017	2018	Cost Savings/Avoidance
_	Project Name	Comments	Who	Effort Days	Budget			
	Monthly hosting (RecoveryPlanner)	Monthly SaaS – budget is annual OPEX	Region/ 3 <sup>rd</sup> party		\$30,000.00²	•	•	
	Revitalize Disaster Recovery Program	Budget a one-time cost to update the program	Region/ 3 <sup>rd</sup> party	25	\$30,000.00	•	-	
Hard	Hardware							
Data	Datacenter (150 Frederick)							
	Energy Measurement and Tracking	Purchase Schneider	Region					
		Electric PM5560 PowerLogic High Density			\$2,200.00	•		
		Meter						
	Energy Measurement and Tracking	Installation of PM5560	3 <sup>rd</sup> party		\$1,800.00	•		
	Energy Measurement and Tracking	Solarwinds configuration	3 <sup>rd</sup> party	2	\$2,400.00			
	Airflow Management (HVAC)	Cable management clean-up	Region/ 3 <sup>rd</sup> party	7	\$5,000.00	•		
	Airflow Management (HVAC)	Seal floor (grommets) -		1		•		
		includes installation (\$35/ea x 10)	3 <sup>rd</sup> party		\$560.00			
	Airflow Management (HVAC)	Air-balance/HVAC assessment	3 <sup>rd</sup> party	2	\$3,000.00	•		
	Support Systems	Facility lighting (motion sensors) \$60/ea x 4	3 <sup>rd</sup> party		\$240.00	•		
	Support Systems	Facility lighting installation	3 <sup>rd</sup> party	1	\$600.00	•		
Software	vare							
	Server consolidation (VMware)	Complete virtualization project	Region/ 3 <sup>rd</sup> party	15	15,000.00	•	-	Substantial savings in hardware and cost of hosting physical servers

 $^{\mathbf{2}}$  Cost is for Year 1 - all subsequent years must be included in the annual budget



						2017	2018	
Q	Project Name	Comments	Who	Effort Days	Budget			
Network	vork							
	Technology Infrastructure Architecture Roadmap (Workshops)	A series of workshops with external SMEs	3 <sup>rd</sup> party	2	\$10,000.00	•	•	
	Documentation Development (CMDB, Solarwinds)	Design and build using both in-house and external resources	Region/ 3 <sup>rd</sup> party	∞	\$10,000.00		•	
Data	Data Management							
	Data Archiving Software (Point)	Includes installation	Region/ 3 <sup>rd</sup> party	e	\$25,000.00	•	-	
	Data Archiving Cloud Services	Object-based storage - monthly SaaS. \$0.07/GB (10TB starting point)	Region/ 3 <sup>rd</sup> party		\$8,400.00	•	•	CommVault costs of \$10,000.00 per TB
	Totals				\$139,200.00			

Note that there will be a required budget increase in 2018 and subsequent years to allow for the full annual cost of resourcing for planned 2018 project and development work, etc.