4. Provide a stable, secure, robust and scalable infrastructure.

4.1 Maintain a reliable and accessible network infrastructure.					
Measurable Objectives	**Activities/Tasks**	**Participants**	**Timelines**	**Estimated Costs**	**Evidence**
4.1.1 Wide Area Network (WAN) / Local Area Network (LAN) – Maintain currency and redundancy of the District's network cabling, routing and switching infrastructure.	**4.1.1.1 MVC Refresh** - Complete router and switch upgrades	Information Technology	Spring 2015	$1.4M	Equipment currently up-to-date. Equipment refresh will be ongoing.
	4.1.1.2 NC Refresh - Complete router and switch upgrades	Information Technology	Summer 2015	$1.4M	Equipment currently up-to-date. Equipment refresh will be ongoing.
	4.1.1.3 RCC Refresh - complete router and switch upgrades	Information Technology	Ongoing	TBD	Equipment refresh will be ongoing. Preliminary plan for RCC has been developed, implementation scheduled for Spring of 2019.
4.1.2 Wireless Access – Review current coverage and expand as needed to meet acceptable standards.	**4.1.2.1 Coverage Areas** - Assess, expand and maintain acceptable wireless access areas	Information Technology	Ongoing	TBD	Equipment purchased, Training in progress.
	4.1.2.2 Ease of Use - Streamline and simplify use of the District's wireless access protocol	Information Technology	Ongoing	TBD	Expanding wireless for printing, clocks, Door Bells, Cameras.

4.2 Maintain a secure environment for the District's technology equipment and information.					
Measurable Objectives	**Activities/Tasks**	**Participants**	**Timelines**	**Estimated Costs**	**Evidence**
4.2.1 Network Operations Centers (NOC), Main Distribution Frames (MDF), Intermediate Distribution Frames (IDF) – Maintain physical security standards.	4.2.1.1 - Physical Security - Ensure appropriate security to all NOCs, MDFs and IDFs with the use of locks, alarms and cameras	Information Technology, Facilities, Risk Management	Ongoing	TBD	MVC NOC completed. Various other network closets are an issue.
4.2.2 Data Security – Ensure best practices are followed with respect to data security (firewalls, authentication,	**4.2.2.1 Data Access and Security Taskforce** – Create and maintain a policy creation group that oversees data security across the District	Data Access and Security Taskforce	Ongoing	N/A	DAST created, meets monthly.

4.2 Maintain a secure environment for the District's technology equipment and information.					
Measurable Objectives	**Activities/Tasks**	**Participants**	**Timelines**	**Estimated Costs**	**Evidence**
passwords, encryption, intrusion protection).	**4.2.2.2 Policies/Procedures** - Complete the review, revision and creation of District data security policies and procedures (i.e. security appliances, authentication, encryption)	Data Access and Security Taskforce	Fall of 2019	N/A	Initial draft completed. Anticipated finalization in Fall of 2019 .
	4.2.2.3 Training - Enforce approved policies/procedures through education and training	Data Access and Security Taskforce	Ongoing	$35K	Wombat purchased. First 3 modules deployed. Over 800 participants as of 06/16.
	4.2.2.4 Systems - Evaluate, purchase and implement technologies to protect and prevent data corruption and or loss	Data Access and Security Taskforce	Ongoing	$75K	Firewall installed and being used. ProofPoint in the cloud watches emails for DLP. Sophos encryption Protection at the folder level purchased.

4.3 Provide High Availability (HA) for critical technology applications and information.					
Measurable Objectives	**Activities/Tasks**	**Participants**	**Timelines**	**Estimated Costs**	**Evidence**
4.3.1 Operational Continuity – Provide a stable and redundant environment.	**4.3.1.1 Network (Fiber)** - Complete upgrade and redundant connections throughout the District	Information Technology	Ongoing	$100K – year 1 cost	MVC, NC completed. 2 of 10 projects at RCC underway.
	4.3.1.2 Network (Routers/Switches) - Complete upgrade and redundant connections throughout the District	Information Technology	Ongoing	TBD	MVC, NC completed. DL and Lovekin in progress.
	4.3.1.3 Environment - Ensure adequate A/C, power and switch/router redundancy in all technology NOCs, MDFs and IDFs	Information Technology	Ongoing	TBD	Problem in summer with college closures on Friday, Saturday, and Sunday. Equipment gets hot and we lose equipment due to heat. RCC NOC new air conditioning unit installed fall of 2017. Second air conditioning unit at the RCC NOC being replaced Spring 2019.