

Core Infrastructure Reinvestment

Category: Information Technology

Department Lead: IT Services

Type: New Project

Project Description, Benefit, Estimate, and Schedule

This is a comprehensive plan to reinvest in all core infrastructure and backend systems to be able to improve overall systems security, modernize support, continue providing flexibility and greater access to staff to better serve the public by improving efficiency and response time up to date with secure industry standard options. The goal of this project plan would be to establish a reinvestment fund to properly update all aging core infrastructure that have already reached or will be reaching end of support life within the next 1 - 3 years – most of our existing core infrastructure is already 7 - 9 years old. An ongoing refresh cycle in the out-years requires establishment of a continuous ongoing reinvestment fund.

The proposed CIP reinvestment project plan includes:

- > FY22: Core firewall update with intrusion detection / protection systems (IDS/IPS), Police Body Worn Camera video storage (SAN), Library Public (patron) infrastructure storage (SAN) - (~\$250K)
- > FY23: Next Gen 9-1-1 core infrastructure requirements, DR/COOP core firewall & DR/COOP core switch - (~\$200K)
- > FY24: Library core firewall (w/ IDS/IPS), main edge firewalls - (~\$150K)
- > FY25: Blade server chassis, library edge firewalls, wireless/Wi-Fi infrastructure - (~\$100K)
- > FY26: Core Switch - (~\$100K)
- > FY27: Blade server chassis & fund reinvestment to maintain refresh cycle of all core infrastructure - (\$100K)
- > FY28-31+: Continued fund reinvestment to maintain refresh cycle of all core infrastructure - **\$100K annually**



Capital Funding Plan

Funding Source	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028-31	10-YR Total
Local (Debt)	\$ 250,000	\$ 200,000	\$ 150,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 400,000	\$ 1,300,000
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Total:	\$ 250,000	\$ 200,000	\$ 150,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 400,000	\$ 1,300,000

Funding Notes: The general IT Services operating budget does not have sufficient funds allocated to do the necessary periodic systems or infrastructure refreshes on any sustainable scale and has had to procure solely through vacancy or other one-off funds. This should be planned to budget an ongoing dedicated reinvestment fund rather than general operating budget due to the high dollar and long-term life of the equipment that are not on a regular annual cycle, but require a refresh cycle none the less.

**if no activity per City Charter (Section 6.19) in 3 years note as re-appropriation action*

Impact on Operating Costs

This project will incur standard ongoing annual licensing & maintenance contract costs for the infrastructure that is currently accounted for in the operating budget for the most part . However, maintenance costs have significantly risen across all systems (~10% - 20+% annually) and maintaining a flat budget for years has actually created a growing shortfall the operating maintenance budget. This CIP project does not address that unmet need that is listed in the general operating budget's "Unmet Needs"

Conformity with Comprehensive Plan and Council Strategic Plan/ Equity Lens Score

Consistent with the City Manager's Security Workgroup that includes cybersecurity, as well as the DHS' Cybersecurity and Infrastructure Security Agency (CISA's) recommendations on maintaining base standards of maintained infrastructure.

FY 22-27 Equity Lens Review

<p>Falls Church 2040 Vision, adopted April 10, 2017 <i>In the year 2040, the City of Falls Church is a welcoming and inclusive community – a special place in the heart of Northern Virginia. Involved citizens are key to the City’s long-term success as a leader in education, environmental sustainability, multi-modal transportation, and vibrant economic development. By investing in neighborhoods, community services and facilities, schools, and parks the City preserves small-town character and history while honoring a deep commitment to progress and a growing community. The continual rejuvenation of robust commercial areas supports the City’s high quality of life for all citizens.</i></p>				Burden or Benefit those under stress	Reduce current disparities	Avoiding Implicit Bias or Increased Inequities
				(Q1) Does the proposed project benefit communities of color, low-income neighborhoods, persons with disabilities and/or underserved? Could it be adjusted to avoid or mitigate the burden and/or to realize a higher benefit? How?	(Q2) Does the request help reduce disparities and inequities? If not, could it be adjusted to do so? How?	(Q3) If Q1 and Q2 do not directly apply to this project describe how it does not worsen disparities and inequities?
Department	Project(s)- listed in priority order	Funding Request	City Mgr Recommended Funding	Rank: Low (L)/ Medium (M)/ High (H)	Rank: Low (L)/ Medium (M)/ High (H)	Rank: Low (L)/ Medium (M)/ High (H)
ITS	Network Storage (SAN) required for Police body worn cameras	\$ 100,000	TBD	H Can help create an environment of law enforcement accountability to help bridge the gap of mistrust in communities that have historically felt under-represented and mistreated by law enforcement. This can afford the ability for much broader community trust in the overall accountability of our law enforcement officers charged with protecting the peace and safety of all our citizens.	H Can help create an environment of accountability to help ensure there are no disparities or unequal treatment by our law enforcement personnel and to ensure the integrity of their mission is upheld and can be verified.	N/A
ITS	Network Storage (SAN) required for Library public infrastructure	\$ 50,000	TBD	M Equalizes access to City online services, electronic communications, online education and internet research to identified communities regardless of socio-economic status in the safety of our community Library.	M Increases computer and internet accessibility to all residents regardless of ability to afford, and gives more access to educational resources a is an important component so groups with less access to tools are not at a higher risk.	N/A
ITS	Maintain free Public WiFi, all facilities,	\$ 75,000	TBD	M Equalizes access to City online services, Council meetings, electronic communications, online education and internet research to identified communities regardless of socio-economic status but inequities can still occur if access to a facility is constrained due to lack of transportation or operating hours; higher level of benefit can be achieved by boosting signal range to safe parking areas on a segregated network to secure internal operations	M Increases WiFi infrastructure to all residents regardless of ability to afford internet access but does not address direct availability of mobile equipment; program could be improve by locating grant resources for low-income persons to acquire equipment, educating on adaptable equipment for persons with visually or hearing impairments and/or establish lending library; cybersecurity education is an important component so groups with less knowledge or access to tools are not at a higher risk	N/A
ITS	Core infrastructure reinvestment - 10+ year ongoing plan: Firewalls, core switches, chassis, etc.	\$ 1,000,000	TBD	N/A	N/A	H Project does not mitigate a community wide disparity but the proper maintenance of core infrastructure and systems is required to properly protect personal information data to ensure all citizens and employees receive equal security protection regardless of educational status, pay grade and/or socioeconomic status. All personal identifiable information (PII) data would have same security access regardless of their income, vulnerable population status and/or knowledge and trust of local government processes.