

TO: CHAIR AND MEMBERS
FINANCIAL MANAGEMENT COMMITTEE

DATE: 2018 November 05

FROM: CHIEF INFORMATION OFFICER

FILE: 1920-01

SUBJECT: 2019 INFORMATION TECHNOLOGY CAPITAL PROGRAM

PURPOSE: To request a Capital Reserve Fund Bylaw to finance the 2019 Information Technology Capital Program as outlined in this report.

RECOMMENDATIONS:

1. **THAT** Financial Management Committee recommend Council authorize the City Solicitor to bring forward a Capital Reserves Bylaw in the amount of \$4,654,200 to finance the Information Technology capital program.

REPORT**1.0 INTRODUCTION**

The purpose of this report is to seek Council approval of funding allocation for 2019 Information Technology projects in advance of Council adoption of the 2019 Financial Plan to allow staff to continue with the implementation of IT projects early in 2019. The IT Capital Program facilitates the replacement, expansion and upgrading of enterprise and departmental hardware and software in order to enhance the City's services to the public and improve the efficiency of internal processes.

2.0 POLICY SECTION:

The 2019 Information Technology capital program is aligned with the City of Burnaby's Corporate Strategic Plan by supporting the following goals and sub-goals of the Plan.

- A Dynamic Community – Build and maintain infrastructure that meets the needs of our growing community.
- A Thriving Organization – Protect the integrity and security of City Information, Services, and Assets.

3.0 IT INFRASTRUCTURE PROGRAM

The 2019 IT Infrastructure Program includes initiatives to replace aging computer equipment, upgrade or expand infrastructure to support technical applications throughout City departments, and to enhance service to the public and internal stakeholders. This funding report, subject to approval by Council, would allow staff to proceed with IT Infrastructure initiatives in early 2019.

3.1 INFRASTRUCTURE REPLACEMENT

Estimated \$2,620,900

The City maintains an annual replacement program for its computer equipment such as servers, workstations, monitors, tablets and associated peripheral devices. For 2019, funding is required to replace a number of older servers, workstations, networking devices, cabling and equipment that have reached the end of their useful life.

Specific replacement works consist of:

- Computers, laptops, and related workstation equipment
- Server hardware
- Cabling, wiring and fibre-optics
- Network communications equipment
- Storage disk systems.

3.2 INFRASTRUCTURE REQUIRED FOR GROWTH

Estimated \$1,573,200

This program includes purchases of new computer equipment, peripherals, supporting software and services and software application upgrades. These purchases will support planned 2019 City initiatives designed to address organizational needs, augment public services and reduce business risks associated with aging technology.

Specific works include:

- City network uplink upgrades
- Enterprise infrastructure application upgrades
- Security improvements
- Cloud disaster recovery / business continuity (initial pilot)
- New desktop requirements for departments.

Additional information on the specific projects included in the IT Infrastructure Program is provided in Appendix 1.

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4.0 BUSINESS SOLUTIONS PROGRAM

Estimated \$460,100

The City develops an annual plan to replace and upgrade business applications for the purposes of enhancing citizen service through quicker and easier access to City information and services online, and to ensure internal systems are robust, sustainable and continue to evolve to meet the changing needs of the business.

The projects which comprise the proposed 2019 program have been selected by City departments and prioritized based on criteria established by the City's Executive Steering Committee which consists of senior staff from all departments.

The following are some of the key initiatives included in the 2019 Business Solutions Program:

- Completion of the Time Entry and Approvals application pilot (AEA.0088) - \$321,000
- Departmental systems enhancements and upgrades (AEA.0073) - \$32,100
- Corporate Property Database (AEA.0099) - \$107,000

These expenditures will be included in the 2019 – 2023 Provisional Financial Plan and sufficient Capital Reserve Funds are available to finance the capital projects outlined in this report.

Additional information on the specific projects included in the IT Business Solutions Program is provided in Appendix 1.

5.0 RECOMMENDATION

It is recommended that the Financial Management Committee recommend Council authorize the City Solicitor to bring forward a Capital Reserve Fund Bylaw in the amount of \$4,654,200 to finance the information technology capital program.



Shari Wallace
CHIEF INFORMATION OFFICER

SW/CIO

Copied to: City Manager
Director Finance
City Solicitor

Appendix 1

IT Infrastructure Capital Program for 2019 – Supplementary Information

1.0 INFRASTRUCTURE REPLACEMENT 2019 – (AEC.0019) \$2,620,900

The City maintains an annual replacement program for its computer equipment such as servers, cabling, network, workstations and associated peripheral devices. Funding is required to replace a number of older servers, workstations, and equipment that have reached the end of their useful life.

Specific replacement works consist of:

- PC's, laptops, tablets and related workstation equipment - *\$1,505,500*
 - Deployment of Windows 10 operating system software and updated application packages to City computers, laptops and workstations
 - Standard lifecycle replacement (Note: Given the greater reliability of equipment, IT has moved to a 5-year replacement schedule for standard workstations, 3 years for laptops, and 6 years for monitors)
 - This program will replace 1400 laptops and PCs and 15 tablets.
- Server hardware & Storage disk systems - *\$486,900*
 - Replacement of existing physical servers with faster, larger format servers that will better support our server virtualization initiatives
 - Standard hardware lifecycle replacement based on a risk analysis of the expected life of the units and disk combined with the business criticality of the applications.
- Network communications and data centre equipment- *\$628,500*
 - Replacement/upgrade of existing cabling to maintain continuity and quality of service
 - Uninterrupted power supply and core firewall equipment
 - Upgrading facility switches with current models
 - Upgrading network uplink connection speeds from 1GB to 10GB.

2.0 INFRASTRUCTURE REQUIRED FOR GROWTH 2019 \$1,573,200

This program includes purchases of net new computer equipment, peripherals, software licences and implementation services, as well as upgrades to the technical systems software that operates the hardware. This new infrastructure will support planned City initiatives which address organizational needs, augment public services and reduce business risks associated with aging technology.

Specific works include:

- City network uplink upgrades (AEC.0018) - *\$187,300*
 - Upgrade network speed to 10GB links for large City facilities
 - Inclusion of City conduit in existing Engineering capital works projects, building long-term network capacity for civic communications
 - Migration of City facilities from 3rd party links to City-owned fibre and radio links.
- Enterprise infrastructure application upgrades (AEC.0020) - *\$465,500*
 - Three discrete projects to upgrade the City's print systems, server virtualization and mobile device management systems will be initiated to improve capability in these areas.
- Security posture improvements (AEC.0018) - *\$251,500*
 - Continuing improvement of the City's infrastructure hardening and security posture improvements, this project includes the implementation of enhanced network monitoring tools, e-mail threat detection and security upgrades
 - Upgrades to network perimeter and edge firewalls.
- Cloud disaster recovery / business continuity pilot (AEC.0018) - *\$85,600*
 - Continuation of the City's cloud infrastructure pilot project to provide geographically dispersed systems for the purposes of business continuity
 - Migration of existing City websites and other methods of communication onto the new platform will be initiated where possible.
- Network and Wireless Wi-Fi Infrastructure upgrades (AEC.0020) - *\$133,300*
 - Wireless Wi-Fi facilities upgrade for 10-15 sites
 - Core networking equipment upgrade.
- New desktop requirements for departments (AEY.2019) - *\$450,000*
 - Additional desktop equipment for City departments.

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IT Business Solutions 2019 – Supplementary Information

Online Time Entry and Approvals application pilot (AEA.0088) - \$321,000

This project will enable City staff, supervisors and managers to submit, approve or reject timecards online. The pilot phase of the project will include Finance, Human Resources and Information Technology employees. The pilot phase will complete in early 2019 and will include an assessment of the effort and cost required to roll out this functionality to all City staff.

Corporate Property Database (AEA.0099) - \$107,000

This project will support the migration of the Burnaby Property Database to the new Property Tax system (Tempest) from the legacy Permit Plan system. The permitting and licensing functionality in Permit Plan was replaced in 2016 and this project will enable the final decommissioning of the legacy environment.