City of Burnaby

FINANCIAL MANAGEMENT COMMITTEE

TO: *MAYOR AND COUNCILLORS*

SUBJECT: IT PROJECT PORTFOLIO STATUS UPDATE

RECOMMENDATION:

THAT the report titled "IT Project Portfolio Status Update" dated November 21, 2023, be received for information.

REPORT

The Financial Management Committee, at its meeting held on November 21, 2023, received and adopted the *attached* report providing an update on the current status of major capital IT projects.

On behalf of the Financial Management Committee,

Councillor S. Dhaliwal
Chair

Councillor A. Gu
Vice Chair

TO: FINANCIAL MANAGEMENT COMMITTEE (FMC)
FROM: CHIEF INFORMATION OFFICER
SUBJECT: **IT PROJECT PORTFOLIO STATUS UPDATE**
PURPOSE: To provide an update on the status of major capital IT projects.

RECOMMENDATION

> **THAT** the report titled "IT Project Portfolio Status Update" dated November 21, 2023, be received for information.

EXECUTIVE SUMMARY

The purpose of this report is to update Committee and Council on the status of major active 2023 capital Information Technology (IT) projects delivered by IT in collaboration with city departments and provide a look ahead at their upcoming work plan and schedule.

Our sincere thanks to the Financial Management Committee for all their support in completing the technology program for 2023.

1.0   POLICY SECTION

Not applicable.

2.0   BACKGROUND

Since March 2023, IT started to report on major IT capital projects to the Financial Management Committee. The previous report provided an update for June to September. The following information is an update on IT Projects for late September to December.

3.0   GENERAL INFORMATION

2.1. Highlights

The below projects were completed since the last update:

Project	Go-Live Date
Parks and Recreation Information System Management (PRISM) - Fall Registration	September
Modernizing Digital Workspaces: Email & Microsoft 365 - CAO, Finance (Revenue & Procurement Services), Community Safety and Planning & Development, Engineering & Fire	October
Modernizing Digital Workspaces: Email & Microsoft 365 - Library, RCMP and Mayor & Council	November
Development Approval & Permitting Solution (DAPSM) - Modernizations Online Permit Applications, Online Inspection Booking, Executive Insights Dashboards	November

3.2 IT Project Descriptions and Project Status Updates

3.2.1 Parks & Recreation Information System Management (PRISM)

Project Sponsors: Mary Morrison-Clark, Noreen Kassam, Bachar Khawajah
Project Manager: Doug Scharley

Description: The PRISM Project is implementing a new PRC management system with improved business processes for staff to efficiently and effectively manage activities, programs, and space allotments online, in person and by phone. The ACTIVENet solution is the largest public-facing system in the city. This new solution will offer an improved online user experience through an easy-to-use interface with improved services, including enhanced search and mobile functionality.

Status Update: Fall registration with the new software successfully went live on September 7, 2023. Fall registration was staggered to reduce the volume of customers who access the site during peak program registration. During the first two weeks of Fall registration, 80% of registrations were completed online using the new WebReg, a 30% increase over the same timeframe last year. The new software successfully processed transactions during peak periods without incident. The project will complete the remaining deliverables by the planned project end date of December 31, 2023.

3.2.2 Development Approval & Permitting Solution Modernization (DAPSM)

Project Sponsor: Lee-Ann Garnett
Project Manager: Roseline Dias

Description: The project's objective is to modernize the City's permitting, application and approvals solution, to improve the internal and external user experience, and to provide significant and measurable benefits to our citizens. The team worked closely with the City's Development Approvals Process (DAP) team and the project consultants, KPMG, to align the recommendations of the DAP report with the opportunities for continuous improvement in our EnerGov permitting software. This project has two distinct phases.

Phase 1 COMPLETE (August 2022 – April 2023): Upgrade our development approval and permitting solution (EnerGov) to the latest version to provide a better user interface and leverage other modules available in the EnerGov system.

Phase 2 IN PROGRESS (June 2023 – December 2023): In collaboration with the Development Approval Program (DAP) and KPMG, we are focused on enhancing our permitting system features and workflows. For Residential Single-Family and Two-Family Permits, we provided citizens with the ability to submit online applications for building permits, ability for Certified Program stakeholders to submit related documents (blueprints, drawings, and all required documents) through a paperless digital process, and ability for applicants to apply online for laneway home permits. Applicants also can request related online sub-trade (electrical, plumbing

and gas) inspection bookings. Thirty-three (33) types of permits can now be applied for online through the EnerGov system.

Status Update: In the month of September, DAPSM Phase 2 project rolled out 12 Fire Prevention iPads to fire inspectors with a newer version of iG Inspect that provides staff with an enhanced user experience and provides citizens with real-time results. Fire Prevention inspectors can now perform paperless inspections and provide email or paperless results to citizens in real-time. 40 online sub-trade (electrical, heating, plumbing, gas) inspection booking requests were launched successfully. Residents, contractors, developers, and other parties who want to submit requests for inspections can now do so online. This capability aligns with the City's commitment to creating a faster, simpler, and better experience for applicants through the Development Approval Process (DAP) Project. For the remainder of 2023, the project will focus on continuous improvements for current online inspection bookings and statistical dashboards to provide up-to-date information on the status of all permits and inspections.

3.2.3 Website Modernization: Golf Burnaby (COMPLETE)

3.2.4 Golf Membership Management System (COMPLETE)

3.2.5 Customer Service Centre (CSC)

Project Sponsor: Noreen Kassam
Project Manager: Dario Sumano

Description: The Customer Service Centre Project will centralize the intake, management and tracking of all service requests, inquiries, and feedback from the City's customers – with an aim to improve external customer service and operational efficiency. The project will achieve this by deploying a centralized multi-channel customer service center with web, mobile app, phone, and in-person offerings – all managed by dedicated customer service city staff.

Status Update: In September, the Customer Service Centre project team began engagement with License and Bylaw with the intent of onboarding their remaining work areas. Onboarding for each of these departments will be sequential, ensuring low disruption to the departments and a quick training uptake for the agents. Following a review of the lessons learned, the project team developed an in-house solution to replace the existing one, as its performance was not ideal. Alignment on requirements and scope for this interim solution were discussed and agreed upon with the team. It is expected that the in-house developed solution will support the Customer Service Centre's basic functional needs by early fall of 2023. The project team will manage the remaining scope with the intent of delivering a Customer Relationship Management (CRM) solution capable of integrating with components for Telephony, Work Force Management and Quality Management by mid-summer of 2024.

3.2.6 Mobile Hansen/IPS: Enabling a Mobile Work Force

Project Sponsor: Herman Louie

Project Manager: Saad Khan

Description: This project piloted a Field Inspector Mobile Application (in 2022) that allows for the creation, update, and closure of Hansen/IPS Customer Service Requests, Work Orders, and Inspections using iPads. A 50-80% time savings for inspections is expected by transitioning from a manual paper-based process to a real-time field inspection app that communicates with the City's existing back-office Hansen/IPS Application.

In 2022, iPads were rolled out for the Sidewalk Inspection Program so that the Inspection team can receive customer service requests and work orders in the field.

Status Update:
- Bulky Pickup Recycling (Solid Waste): 6 remaining iPads are configured and deployed to the remaining trucks and back office
- Electrical (Pumps and Controls): Contractor roles are tested, and deployment is put on hold due to resource constraints in Pumps and Controls and GIS team
- By-laws (Licensing): On hold due to By-Laws and GIS team resource constraints

3.2.7 Enterprise Content Management (ECM) & Governance System

Project Sponsor: Juli Halliwell
Project Manager: Saad Khan

Description: This project will transform the way the city stores and manages its documents, records, and other content. The new solution will look to increase staff efficiency by reducing time-consuming tasks around records storage and retrieval, augment compliance with applicable legislation and regulatory requirements, and improve privacy protection, access and transparency, document integrity and authenticity and assist the city to meet evolving legislative requirements for records management.

Status Update: File share data clean-up is complete for Corporate Services. The project team evaluated the lessons learned and documented the repeatable data clean-up process, which will be used by the remaining city departments. Finance and the Office of the CAO agreed to participate in the next round of data clean-up and planning meetings are being held with the teams. A Request for Proposal (RFP) to select an implementation partner closed on October 4, 2023 and the team are currently evaluating the submissions.

3.2.8 Modernizing Digital Workspaces: Email & Microsoft 365

Project Sponsor: Bachar Khawajah
Project Manager: Bhavan Mahal

Description: The goal of this project is to replace the current Microsoft Office environment with modern Microsoft 365 technology to improve efficiency and collaboration and advanced data visualization as well as migrate the city email system from on-premises to cloud to improve user experience, accessibility, security.

Status Update: Additional departments have been migrated successfully to the new platform since August 2023 including Land & Facilities, Finance, CAO, Community Safety, Planning & Development, Engineering, Library, Fire, RCMP and Mayor & Council. It is anticipated that PRC will migrate to the new platform by the end of November. Microsoft Teams training sessions are available every Tuesday & Thursday morning and afternoon; staff can sign up for these training sessions through the LMS. There is a communication plan in place to inform staff about the decommissioning plan for Jabber Chat & Zoom by the end of 2023. The project is within the approved scope and budget and will be completed by the end of 2023.

3.2.9 City-Wide Conduit & Fiber Build

Project Sponsor: Keith Leclerc
Project Manager: Peyman Teymourian

Description: This is a multi-year program to provide high-speed connectivity between all city locations (at a reduced cost by becoming less reliant on telecommunications companies such as TELUS, Rogers, and Shaw). The IT department collaborates with the Engineering department to utilize existing conduits (repairing where required) or to lay new conduits across the city. The conduit contains high-speed fiber optic cables that will connect all city locations with high-speed internet. Each year, IT in collaboration with Engineering develop a plan to install conduit and fiber at select City locations.

Status Update: In collaboration with the Engineering department, IT is in the process of creating the Issue for Tender (IFT) documents to post an RFP for conduit construction by the end of the year in regard to:
- Royal Oak Avenue to Nelson Avenue along Dover Street
- Central Boulevard to Kingsborough Street along Willingdon Avenue
- Byrne Road to Riverway Golf Course along Bill Fox Way
- Griffiths Drive to Kingsway along Edmonds Street and Tower Road

In the meantime, the IT team has designed routes in preparation to pull fiber when conduit construction is completed.

3.2.10 Expanding Wi-Fi Access

Project Sponsor: Keith Leclerc
Project Manager: Peyman Teymourian

Description: This initiative is to enhance free Wi-Fi access in public areas. Under this project, IT staff will assess the various locations for wireless internet signals, identify any coverage gaps and install required hardware in areas with a weak Wi-Fi signal.

Status Update: IT has acquired new access points (APs) in conjunction with a maintenance plan to improve and maintain wireless infrastructure at
- City Hall

- Burnaby Art Gallery
- Bonsor Recreation
- Deer Lake Complex
- Edmonds Community Centre
- Fire Hall #1
- McGill Library
- Metrotown Library
- Riverway Golf Course
- Tommy Douglas Library
- Laurel Street Works Yard
- Christine Sinclair Centre
- Rosemary Brown Arena (inside and outside)
- Riverway Golf Course Range and Laurel Street Works Yard – installation of external access points

The IT team are analyzing the installation and replacement of additional site access points and creating the infrastructure in new locations to be able to equip and provide them with free Wi-Fi services in areas like densified corridors, parking lots, and other public gathering locations.

3.2.11 Laurel St. Data Centre Build & Equipment Migration

Project Sponsor: Keith Leclerc
Project Manager: Peyman Teymourian

Description: The Laurel Street Data Centre (LSDC) will replace the current data center located in City Hall; it will be the primary data center for the City of Burnaby.

Status Update: Structured cabling for the facility has been completed and will be used to connect servers and storage and commission the facility for use as a data center. The facility is undergoing a review to certify the space according to Uptime Institute's standards which provides a benchmark that the facility is maintained and functioning to a standard that is globally recognizable. In preparation for this certification, the IT department is currently installing new security standards and developing access and maintenance processes to secure the Data Centre in preparation for commissioning production systems into this space.

3.2.12 Disaster Recovery Backup Site (Kamloops)

Project Sponsor: Keith Leclerc
Project Manager: Peyman Teymourian

Description: In 2021, IT started provisioning and testing disaster recovery services in a third-party data center outside the Lower Mainland (built to purpose). This was the first step in providing a robust and independent disaster recovery platform for key business applications.

The new disaster recovery site will be set up to support the rebuilding of the primary data center located in Burnaby. The Kamloops site will hold a long-term retention

backup system for the City of Burnaby in the unlikely event of complete destruction of the primary city-hosted data center.

Status Update: Equipment has been transferred to this location and commissioned into the rack spaces leased by the city. This location is now connected to the city's core infrastructure and the balance of the plan is to complete the commissioning of virtual infrastructure in this location as a disaster recovery site which will support the city in emergency response plans, rebuilding of core infrastructure, and supporting separation of systems and data outside of the Burnaby region.

3.2.13 Fire Program: Digital 911 Dispatch Phone System Replacement

Project Co-Sponsors: Dave Critchley & Heather Wilson
Project Manager: Azim Tarmohamed

Description: This project replaces the existing 911 phone dispatch system with the newer phone technology that supports digital Next Generation 911. The transition to the Next Generation 911 system is mandated by Canadian Radio-television and Telecommunications Commission (CRTC) to be completed by March 2025.

Status Update: The Master Service Agreement (MSA) and Netagen Customer Assurance document was updated as requested by the city with input from the Legal team, and it was accepted by Netagen. A separate discussion with Avaya was completed and some End User License Agreement (EULA) terms were updated after discussion with Avaya. An agreement in principle was reached with both vendors and a Council report was prepared and submitted for the Council meeting on October 16, 2023. The forecasted completion date of the project is September 2024.

LGA (Local Government Authority) Agreement update: The GVRD (Metro Vancouver) will be signing the LGA Agreement with TELUS for NG911 Emergency Services on behalf of all municipalities. The target for contract signing is the end of 2023; if the contract is not signed by the end of 2023, the GVRD will request an extension from the Canadian Radio-television and Telecommunications Commission (CRTC).

3.3. Conclusion and Next Steps

The key achievements from IT Capital Projects in 2023 are as follows:

- **Parks and Recreation Information System Management (PRISM)**: Fall registration successfully went live on September 7, 2023; there was a 30% increase in the use of WebReg over the same time last year. The remaining project deliverables will be completed by the planned project end date of December 31, 2023.
- **Development Approval & Permitting Solution Modernization (DASPM) Phase 2** successfully deployed capabilities in multiple agile sprint releases from June through September. Ipad devices for 50 building inspectors with the upgraded version of IG Inspect were successfully deployed. Residents of

Burnaby, contractors, and developers received the ability to apply for 21 new permits (Engineering and Building) via the My Permits Portal in July. In September, 40 online subtrade inspections for Citizens were deployed. Through My Permits Portal, the project added 3 electrical permits, commercial install, extra low voltage electrical work, filming and specials events, and the capability of accepting E-Signatures from Engineering and Building applicants on online permit applications as part of September release. The project engaged with citizens prior to go-live in September and received insightful feedback on permit applications. This feedback was reviewed by the project team and is now being incorporated into our continuous improvement processes scheduled to go-live in November 2023.

- **Website Modernization: Golf Burnaby:** The new Golf Burnaby website went live in March 2023 and matches the branding of the City website. The new Golf Burnaby website has been well received by staff and citizens.
- **Golf Membership Management System:** The new system went live in June 2023 and the new software has been very well received by staff and the new online tee time booking site for golfers is very easy to use and efficient. The Golf Burnaby App feedback has received very positive feedback and has 7,800 downloads.
- **Customer Service Centre (CSC):** A working prototype of the in-house Customer Relationship Management (CRM) has been developed.
- **Mobile Hansen/IPS: Enabling a Mobile Work Force:** Roll out was completed for the Sidewalk Inspection Program so that the Inspection team can receive customer service requests and work orders in the field. The team completed deployment of iPads for all Bulky Pickup Recycling (Solid Waste) trucks and the back office.
- **Enterprise Content Management (ECM) & Governance System**: Data clean-up software and an implementation partner was selected and the data clean-up pilot with Corporate Services was completed. A repeatable data clean-up process was documented, which will be used by the remaining City departments. Completed successful Content Management Proof of Concept (POC) which helped IT and Corporate Services to make key technology decisions regarding organizational governance and the required records management framework.
- **Modernizing Digital Workspaces: Email & Microsoft 365:** Deployment has been completed to the rest of the city departments so all users with dedicated devices are migrated to Microsoft 365.
- **City-Wide Conduit & Fiber Build:** Major Fiber Pull in several locations (Willingdon, Williams, Gilmore, Still Creek, Godwin, Norland, and Canada Way) and activated many sites (Firehall 5 & 7, Willingdon Community Center, Laurel Street Works Yard, Still Creek Works Yard, and 8 traffic intersections) onto city-owned fiber network. Collaboration with Engineering to prepare conduit for more locations to connect to the fiber network is ongoing. In 2023, the total length achieved for conduit was 99KM and 65KM of connected fibre network.
- **Expanding Wi-Fi Access:** Improvements in free Wi-Fi network by replacing many internal and external access points with faster, more reliable devices and more area coverage on Wi-Fi.

- **Laurel St. Data Centre Build & Equipment Migration:** The team completed the structured cabling and improved the security posture in preparation to obtain certification.
- **Disaster Recovery Backup Site (Kamloops):** The site in Kamloops was commissioned and connected to the City Data Center utilizing Telus business internet service.
- **Digital 911 Dispatch Phone System Replacement**:
  - RFP process was completed and a vendor was selected
  - Council report was prepared and project sent for approval for the October 16, 2023 Council meeting

4.0   COMMUNICATION AND COMMUNITY ENGAGEMENT

For all projects that interface with citizens, IT works closely with Marketing and Communications on communication plans to citizens to increase their awareness of these new online services and to gather feedback where required.

5.0   FINANCIAL CONSIDERATIONS

Funding for these IT projects are included in the 2023-2027 Capital Plan.

Respectfully submitted,

Bachar Khawajah, Chief Information Officer

ATTACHMENTS

Attachment 1 – IT Project Portfolio Overview Timeline
Attachment 2 – Timeline Legend Descriptions

REPORT CONTRIBUTORS

This report was prepared by the IT Project Management Office.

Business Solutions Projects

2023 | 2024

#	Project	Department	Go-Live	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2024
3.2.1	Parks & Rec. Info. System Management (PRISM)	Parks, Recreation & Culture	Jul. 2023	→						☆	☆	☆				
3.2.2	DAPSM - EnerGov HTML 5 Upgrade	Planning & Development	Apr. 2023	→			☆									
3.2.2	DAPSM - EnerGov Solution Suite Enhancements	Planning & Development	Sept. 2023									☆				
3.2.3	Website Modernization: Golf Burnaby	Parks, Recreation & Culture	Mar. 2023	→		☆										
3.2.4	Golf Membership Management System	Parks, Recreation & Culture	Jun. 2023	→					☆							
3.2.5	Customer Service Centre - Phase 1	Chief Administrative Office	Jun. 2023						☆							
3.2.5	Customer Service Centre - Phase 2	Chief Administrative Office	TBD							Additional Services & Departments						→
3.2.6	Mobile Hansen/IPS: Enabling a Mobile Work Force	Engineering	Nov. 2023	→										☆		
3.2.7	Enterprise Content Management - Data Clean Up	Corporate Services	Dec. 2024						Pilot	☆						→
3.2.7	Enterprise Content Management - Implementation	Corporate Services	Dec. 2025						POC	☆						→
3.2.8	Modernizing Digital Workspaces: Email & Microsoft 365	IT - Enterprise Applications	Dec. 2023	→										☆		

Infrastructure Projects

#	Project	Department	Go-Live	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2024
3.2.9	City Wide Conduit & Fibre Build	IT - Infrastructure	Ongoing													→
3.2.10	Expanding Wi-Fi Access	IT - Infrastructure	Ongoing													→
3.2.11	Laurel St. Data Centre Build & Equipment Migration	IT - Infrastructure	Ongoing													→
3.2.12	Disaster Recovery Backup Site (Kamloops)	IT - Infrastructure	Dec. 2023													→
3.2.13	Fire Program: Digital 911 Phone System Replacement	Fire Systems Resiliancy	TBD													→

Attachment 2 – Timeline Legend Descriptions

Active IT projects progress through four major phases as shown below.

Active Projects
1) **Assess / Define** Determine the business case: the project feasibility, ultimate goals, objectives, stakeholders, costs, option analysis and recommendation.
2) **Acquire / Plan** Development of technical and business requirements, tender or Request for Proposal (RFP) proponent evaluation, vendor selection, contract negotiation and award. Developing an outline or roadmap that the team will follow to complete the project, including resources and timeline.
3) **Implement / Execute** Develop, configure, test, and release the project to production.
4) **Stabilize** Support Project Launching, Project Monitoring & Control and Project Closure, includes release activities, bug fixes, minor improvements, and hand-off to operational teams.

Legend

ASSESS/DEFINE	ACQUIRE/PLAN	IMPLEMENT/EXECUTE	STABILIZE