TRANSFORMING POLICE TECHNOLOGY INTO THE FUTURE

INFORMATION AND TECHNOLOGY PLAN

PREPARED BY INFORMATION TECHNOLOGY BUREAU

INFORMATION AND TECHNOLOGY PLAN OVERVIEW

The rapidly advancing world of technology continues to offer York Regional Police immense opportunity to adopt digital transformation that will significantly enhance our capacity to assist our members and the community.

The 2023-2025 three-year Information Technology (IT) Plan is developed to align with the three-year business plan, that is built on two organizational pillars: our People and Our Community. Key strategic objectives are: Safety and Well-being, Inclusion and Belonging, Innovation and Continuous Improvement; Recruitment and Retention.

The IT plan was formulated after conducting an environmental scan, consulting with technology research groups, surveying and gathering feedback from YRP business leaders, organizing technology town hall meetings with frontline officers, as well as the completion of an IT leadership survey.
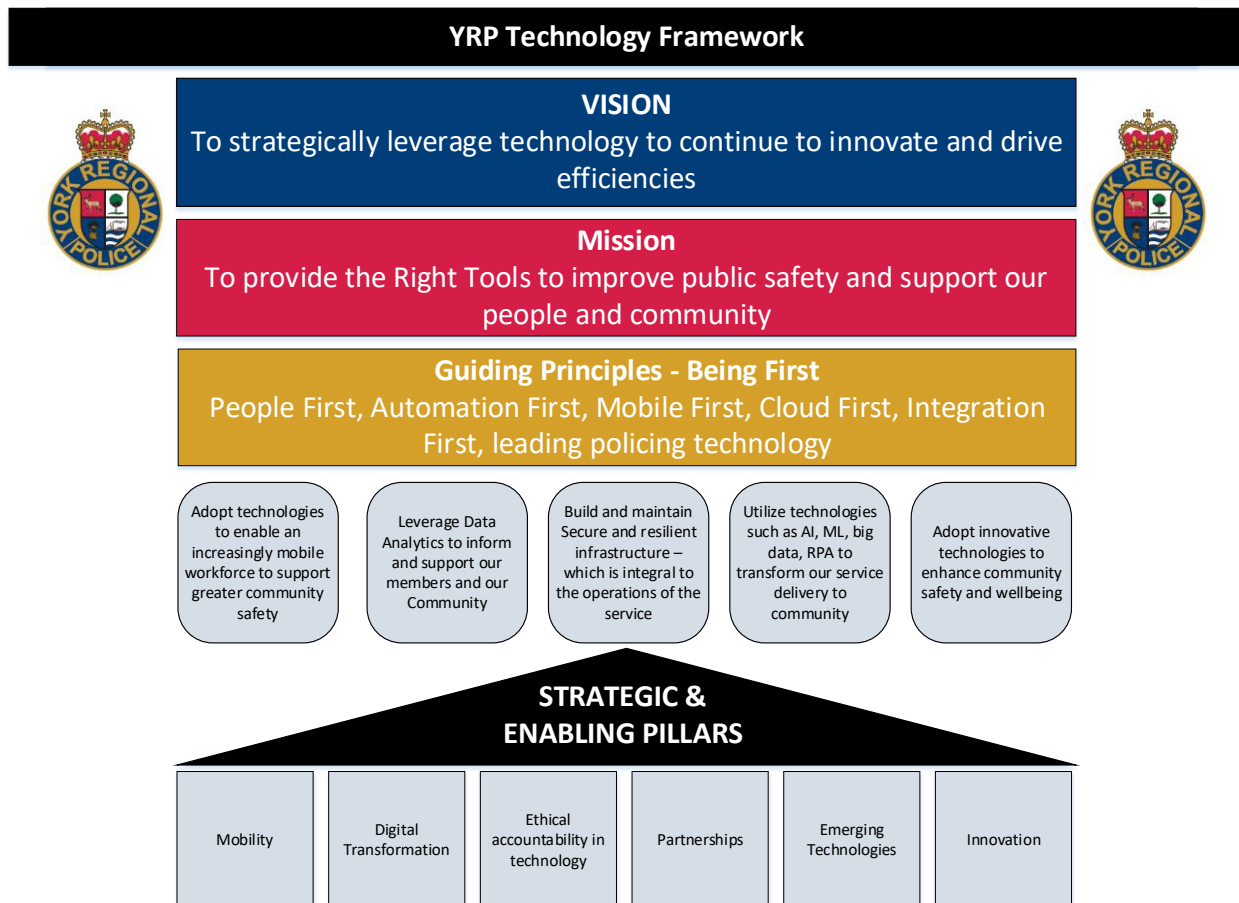
The feedback highlighted several common themes, including the need for increased innovation, better system integration, service delivery automation, enhanced mobile functionality, streamlined officer workflow, and greater IT capacity to meet the needs of the members.

Based on a strong foundation in our organization's vision, mission, ethics and values, our IT vision is to strategically leverage technology to continue to innovate and drive efficiencies. The IT mission is to provide the right tools to improve public safety and support our people and community. The IT Being First principles will guide us in accomplishing our mission and realizing our vision.

IT Being First principle contains the following:

- Being First - Enhance our role as a leader in police technology and innovation
- People First - Ensure members and constituent needs are met
- Mobile First – Access the right information anywhere, anytime to support a safe community
- Cloud First – Provide secure, highly redundant, accessible, and expandable platforms
- Automation First – Drive automation and digitization of the service delivery model wherever possible
- Integration First – Improve productivity and quality through data-driven, highly integrated solutions
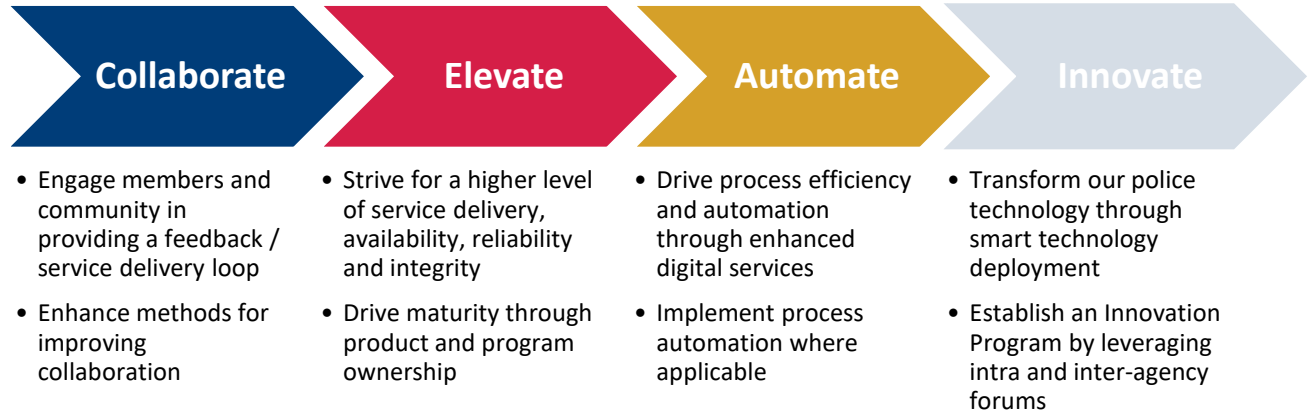
YRP INFORMATION AND TECHNOLOGY FRAMEWORK

YRP Technology Framework

VISION
To strategically leverage technology to continue to innovate and drive efficiencies

Mission
To provide the Right Tools to improve public safety and support our people and community

Guiding Principles - Being First
People First, Automation First, Mobile First, Cloud First, Integration First, leading policing technology

Adopt technologies to enable an increasingly mobile workforce to support greater community safety	Leverage Data Analytics to inform and support our members and our Community	Build and maintain Secure and resilient infrastructure – which is integral to the operations of the service	Utilize technologies such as AI, ML, big data, RPA to transform our service delivery to community	Adopt innovative technologies to enhance community safety and wellbeing

STRATEGIC & ENABLING PILLARS

Mobility	Digital Transformation	Ethical accountability in technology	Partnerships	Emerging Technologies	Innovation

ACTION PLAN

The York Regional Police Information Technology Bureau will continue to improve service delivery and improved capability through a prioritized focus on strategic enablers including IT staff engagement and training, business alignment, organizational change management, member coaching, sound fiscal monitoring, IT governance, data-driven decision making, and cloud platform strategies. This focus will ensure the strategic selection, implementation and deployment of products and services that will continue to highlight YRP's position as a strategic leader in community and policing services. Overarching strategies will be informed through environmental scans, internal partnerships and external collaboration to ensure a strategic framework for IT alignment is achieved.

IT ACTION PLAN

Collaborate	Elevate	Automate	Innovate

- Engage members and community in providing a feedback / service delivery loop

- Enhance methods for improving collaboration

- Strive for a higher level of service delivery, availability, reliability and integrity

- Drive maturity through product and program ownership

- Drive process efficiency and automation through enhanced digital services

- Implement process automation where applicable

- Transform our police technology through smart technology deployment

- Establish an Innovation Program by leveraging intra and inter-agency forums

KEY TECHNOLOGY AREAS AND STRATEGIC INITIATIVES

YRP Connected Community and Connected Officer (C3O)

Community safety is everyone's responsibility. By introducing the YRP C3O initiative, we will leverage existing and emerging technologies such as Mobility, Artificial Intelligence (AI), Big Data, Machine Learning to closely connect with our community and our members.

YRP Connected Community

YRP External Website (www.yrp.ca)

York Regional Police looks to redesign and relaunch its website with all-new functionality to enhance the relationship between our people and our community.

The new website will allow for better storytelling opportunities and a greater capacity for information sharing in real-time, with the possibility of push notifications and customizable subscription options. The website will feature

improved functionality on mobile devices and modern, user-intuitive design.

YRP will also explore the ability for members of the community to comment and interact with the police service on the new website. The move to a new website will improve service delivery and the capability to provide superior customer services by increasing web-based service offerings available online, like crime reporting, collision reporting and more.

An updated website will also allow for seamless integration with existing and emerging technology and web products already in use, such as the Community Safety Data Portal, Talent Management System, paid-duty booking system, etc.

YRP Connected Officer

- Establish a Connected Officer framework
- Build YRP Connected Officer platform
- Conceptualize the YRP Connected Officer Mobile App, that simplifies and automates officers' workflow supports Push Notifications, Poll and Survey, links to other YRP Apps, YRP Connected Officer Forum, YRP News, etc.
- Continue to adopt emerging technologies that create efficiencies for officers by automating cumbersome administrative processes and integrating various disconnected systems

Digital Police Notebook – eNotes
As one of Canada's leaders in the digitization of police note-taking, a process that has finally eliminated the reliance on pen and paper after 150 years, we continue to modernize how officers perform their duties and serve the community.

The adoption of electronic notetaking (eNotes) has resulted in a significant improvement in the legibility of officers' notes, substantial cost savings associated with the paper and storage processes and significant gains in officer efficiency.

By the end of 2023, all frontline officers will transition to a digital police notebook or electronic notes. In 2024, the Investigative Suite will be implemented within YRP.
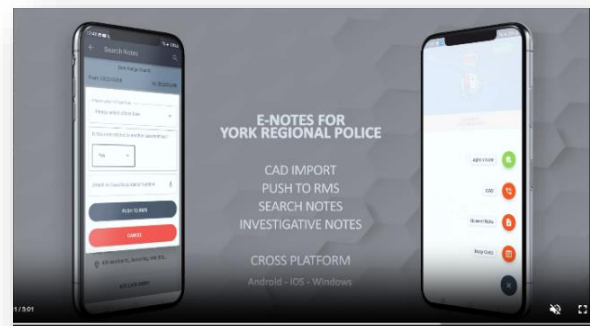
BodyCam Technology

Body-worn camera technology is an effective tool to capture evidence. Police services have had great success stories utilizing body-cam technology.

We will continue to monitor the technology market and improve our readiness, should the adoption become imminent.

Enhance Policing Service Delivery Through Technology

Providing service updates to customers has long been a best practice in commercial/retail industry. YRP, as the first in Canada, implemented the innovative solution SPIDR Tech, which has modernized how YRP delivers our police service. Built on the recent success of the implementation, including adult pre-charge diversion program, we will continue to evaluate and identify opportunities to enhance our service delivery.

Hello,

Thank you for calling York Regional Police. For your records, your incident number is:

23-186901.

If the situation has changed please call (866) 876-5423 ext. 7008 and provide an update. If this has escalated to an emergency, please call 9-1-1.

Non-emergent calls for service may be addressed by phone, rather than in person. There will be no changes to police response in an emergency.

Thank you
York Regional Police

Text 'STOP' to unsubscribe from all future messages.

Digital Workspace

The COVID-19 pandemic accelerated the transformation of how work is carried out, particularly for knowledge workers. The 'work from anywhere' idea not only eliminates the need for physical office space, but it can also disrupt work culture.

- Continue to improve the cohesion of remote work technologies to ensure a smooth and seamless experience for both in-person, remote work and hybrid interactions
- Enhance availability of parade/training anywhere, which allows all officers, including senior officers, to participate and address the parade regardless of where they are.

Ethical Use of Technology - Artificial Intelligence(AI) and Machine Learning(ML)

The use of traditional AI in the policing sector is not new. Whether in the use of facial recognition, license plate identification, or text to speech, AI has been an embedded feature of many applications for some time. YRP has been a leader in respecting human rights, protecting each individual's privacy, in keeping with our commitment transparency.

With the recent advent of generative AI tools such as ChatGPT (text), Dall-E-2 (image), audio (Musnet), and video (Picture), it is important that YRP review the risks associated with emerging technology tools and not only prepare - by establishing governance frameworks including policies that define appropriate use -but evaluate the impact of these technologies in law enforcement and broader society. Generative AI utilization has the potential for many benefits including the augmentation and facilitation of administrative tasks, but it also introduces risks that must be carefully considered including potential intellectual property Infringement, hallucination or false information, or impact on staff roles and responsibilities. YRP IT will undertake a review of the

appropriate use of these tools and work with the senior leadership to establish appropriate guidelines and governance.

### Motor Vehicle Collision (MVC) Self Reporting Portal

Following a successful pilot in 2023, the design, development, and implementation of the MVC – Self Reporting Portal will be a significant step in improving our service delivery. The MVC – Self Reporting Portal is anticipated to be launched in 2024. The portal allows citizens to report their minor vehicle collision on their phones or computers. Not only does it save citizens time in driving to a police station or Collision Reporting Centre to report a minor collision but also provides frontline officers the ability to handle priority calls for service.

Enterprise Resources Planning (ERP) Implementation

- Implement a Talent Management System to modernize critical human capital management processes including recruiting, learning and staff development processes across the organization
- Implement a modern workforce management solution that will improve scheduling and shift planning, time and attendance management, wellness and ability management and provide insights and analytics on workforce data enhancing data-driven decision making
- Maximize system integrations to enhance automated flow of information between systems to improve operational efficiency by reducing duplicated manual data entry and disconnected customized forms and reports

Business Solutions and Application Modernization

- Create a strategy and road map to modernize existing applications developed in house. Seek opportunities to rationalize and maximize the application capabilities
- Continue to monitor the technology market trends to identify new opportunities that will enhance critical policing processes and solutions such as Computer-aided Dispatch (CAD), or Records Management System (RMS)
- Evaluate and adopt Robotic Process Automation (RPA) and Business Process Automation (BPA) solutions to automate key business processes

- Identify risk-validated AI capabilities and incorporate into business solutions and analytics where applicable and appropriate
- Review the readiness of low code/no code rapid application development platforms to better meet the needs of business demands

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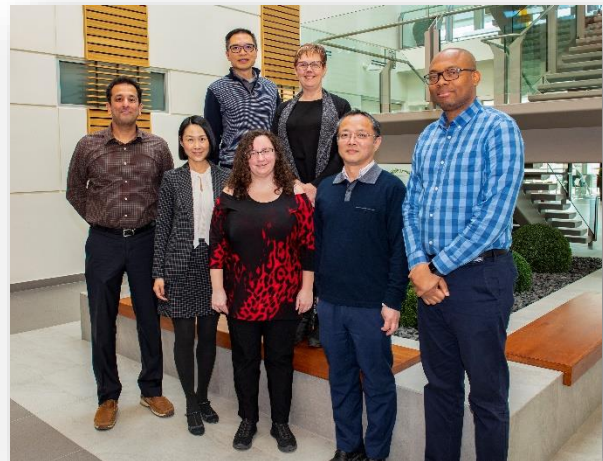
BUSINESS INTELLIGENCE (BI) AND DATA ANALYTICS

The Business Intelligence and Data Analytics team has made a significant amount of progress over the years to harvest valuable information from disparate databases and systems. This information has been leveraged by many areas across our service, such as: The Real Time Operations Centre, Uniform Patrol, Investigations, Finance and Wellness teams among others. Most recently, we created a new Community Safety Data Portal which has informed and engaged our community with relevant crime and road safety data. We believe community safety is a shared responsibility and now empowered by real-time data our citizens are engaged in our mission more than ever before.

Looking forward, our organization has identified opportunities to innovate in the following areas:

Dashboards and Maps

With the implementation of the Connected Officer program, which sees all our officers equipped with their own mobile devices, we will begin to develop new mobile-specific dashboards and maps to ensure our officers have all the information they need when they are out of their patrol vehicle.
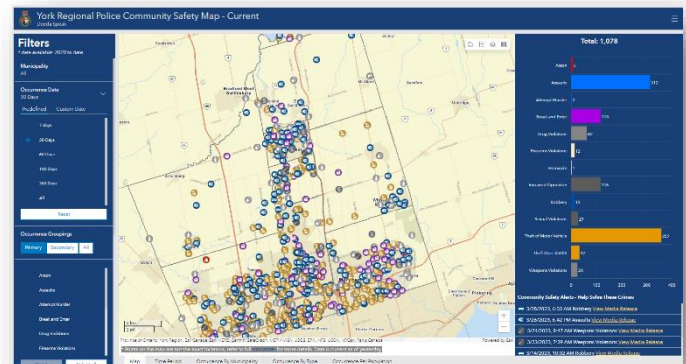
Analytics

We will increase our investment in data science, taking a deeper dive into our data to better understand the whys behind various crime trends. This will support new crime prevention and investigative strategies which will augment and automate our ability to forecast crime and staffing requirements, which will enable our organization to be more proactive and efficient with our resources.
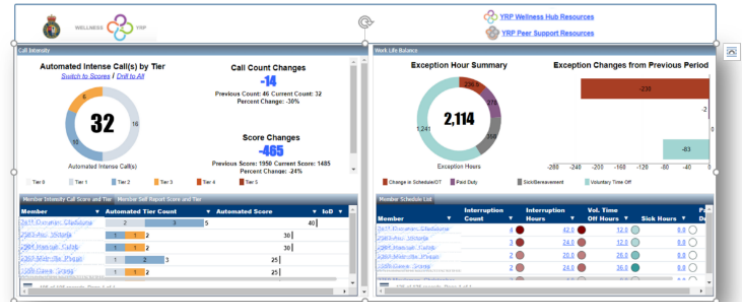
Member Wellness

Member wellness is an organizational priority and we will continue to implement and enhance our industry-leading member wellness analytics technology across the organization to support all our members.

We continue to work with police leaders from across Canada to increase collaboration with our policing partners, through data sharing initiatives, such as the inter-agency bail-management program, as well as providing guidance and support to new data collection and analysis challenges.

Sustainable Technology

Hybrid Patrol Vehicles

As of the end of 2022, York Regional Police have deployed more hybrid patrol vehicles than any other police services in Canada and planning for 50 per cent of frontline patrol vehicles to be replaced with hybrids by the end of 2024. To date, these vehicles have resulted in annual gasoline savings of 217,500 litres and annual emission reductions of 510 tonnes, equivalent to average annual emissions from 93 cars or light trucks.   Frontline policing vehicles present a challenging case for mass EV adoption, as no current EV on the market today can charge completely for its next shift in the very little down-time that operational front-line police vehicles typically have.

YRP continues to monitor the EV market and the related infrastructure to support them, however we are also closely monitoring developments in other alternate energy forms such as hydrogen.

CORPORATE SECURITY AND IT INFRASTRUCTURE

Next Generation 9-1-1
Within the next year, YRP will implement a new 9-1-1 call handling solution. This system will replace analogue systems and provide a vital platform designed and optimized for the information age. The implementation in late 2023/2024 is a first step in providing critical infrastructure that will support new technologies such as real-time texting and other modes of reaching first responders. In addition to the new functionality, the new internet-based protocols will allow for enhanced and automatic resiliency, fundamental in ensuring delivery of 9-1-1 services to the communities we serve.

IT Infrastructure Modernization
- Create a road map and implementation plan to modernize our IT infrastructure to support officer mobility, real time operations and connections, Cloud technology and disaster recovery
- Align network architecture with security architecture to ensure confidentiality, integrity, security, availability of systems and provide a strong foundation for strategic initiatives

Cloud
In 2023 we embarked in a 'Cloud First' strategy, which enables elasticity and resiliency inherent to commercial offerings. A key principle involves the utilization of various providers thereby ensuring diversification across commercial platforms. Diversification will be accompanied by the selection of service strategies based on need and value

Infrastructure as a Service (IaaS)
YRP will reduce the on-premise footprint of hardware by migrating approximately 80 per cent of storage and servers to the cloud. The necessary contracts have been secured along with various high-speed links into the cloud to facilitate the migration and sustain ongoing service delivery.

The infrastructure service provides a resilient and elastic framework that can quickly accommodate additional applications and supporting technologies as needed to support YRP. As the service includes redundancies and replication across Canada, disaster recovery and business continuity concerns will also be address by design.

Software as a Service (SaaS)
YRP has commenced the migration of various productivity suites, including Microsoft Teams, organization-wide. Over the next two years, to the migration to Microsoft Exchange online will commence. YRP has secured the necessary licensing for the next three years, along with additional components needed to support security and compliancy. The migration of additional applications

such as Microsoft Word and Excel to name a few, will enable browser-based applications, reducing or limiting the need for these apps to be installed locally.

Additional items on the road map include the plan to evaluate the migration of other critical software applications, such as Versaterm's Records Management System to a SaaS offering which incorporates the necessary security and availability requirements. This will be accomplished in conjunction with other partner agencies providing additional governance and adoption.

YRP uses SharePoint as our administrative records solution and is installed on on-premises infrastructure. We plan to continue the cloud-first strategy to migrate these administrative records to MS SharePoint online with the intent of reducing the administrative effort required currently deployed to maintain various on-premises systems. Features made available will enable us to enhance our information classification, providing for automatic labeling and the process of handling information to be repeated.

Other opportunities will be identified and deployed as appropriate including the DocuSign implementation currently underway. Once implemented it will provide greater efficiency in document-routing, processing and approval.

Cyber Security and Risk Management

YRP will continue maturing the Security and Risk Management program with a focus on several key initiatives. The first is to expand on threat intelligence feeds with automatic processing of actionable intelligence. This will shore up cyber-defenses ensuring that current safeguards and controls in place are effective.

Corporate Security has engaged in a two-year pilot with a commercial entity to provide 24/7 cyber security monitoring, providing YRP with a platform to collect and monitor any potential threats and events within our environment. A Security Operation Centre (SOC) will be a cloud- based platform, collecting telemetry from various elements from our environment. The SOC will provide YRP with Security Orchestration & Automated Response (SOAR) and Endpoint Detection and Response (EDR) capabilities and activities. Corporate Security will continue to collaborate with Emergency Management to ensure that key systems to our success are identified and plans in place for optimal key service delivery across the organization. Activities associated and supported with Business Continuity will be supported with our Cloud Strategy.

YRP continues to plan for future cybersecurity risks by ensuring agility and resources to respond and recover, promoting organizational resilience. Cybercriminals will continue their assault on operational technology, including attacks against the hardware and software that monitor and operate our equipment, assets and processes. These attacks are becoming more common and disruptive. YRP will incorporate resiliency architecture and defenses in addition to the focus on information theft. Corporate Security will concentrate on human and environmental safety.