

PSCIOC Information-Sharing Template – September 2020

Information Sharing is collected for the purpose of the PSCIOC Meeting of September 2020.

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Administration : Ontario		Contact
1. Accomplishments: Briefly highlight major IT/IM accomplishments, progress, and/or significant milestones achieved in your jurisdiction over the past 6 - 12 months.		
<u>Enterprise</u>	Technology Roadmap and Investment Plan (TRIP) The Technology Roadmap and Investment Plan is an enabler to: <ul style="list-style-type: none"> • Expedite government service modernization by creating seamless and user-friendly online services and citizen journeys for Ontarians • Create a future-ready OPS workforce with tools and services that support remote productivity The TRIP program is being run along four parallel tracks: <ul style="list-style-type: none"> - Remote Workforce <ul style="list-style-type: none"> ▪ Prioritize applications and tools to support remote work and address critical infrastructure needs - Accelerated Modernization <ul style="list-style-type: none"> ▪ Accelerate design of future state citizen services to support a return to “normal” (based on recalibrated priorities) - Scaling Capacity <ul style="list-style-type: none"> ▪ Build required skills and capabilities (e.g., cloud-computing, data literacy, cyber defense), operating model and governance to execute the roadmap. - Future Proofing, Future Planning <ul style="list-style-type: none"> ▪ Prioritize applications and tools to support remote work and address critical infrastructure needs Enterprise Technology Roadmap Key Components: <ul style="list-style-type: none"> • Prioritize COVID-19 Immediate Responses • Accelerate Modernization through Enabling Technology • Rationalize Application Portfolio for reuse by identifying opportunities for moving Unique-> Shared-> Common • Mitigate Technology Risks to protect, sustain and optimize the mission critical systems of government 	Dafna Carr Corporate Chief Information Officer/Associate Deputy Minister, I+IT Dafna.Carr@ontario.ca Robin Thompson Chief Information Officer Office of the Corporate Chief Information Officer Robin.M.Thompson@ontario.ca

	Outcomes: <ul style="list-style-type: none"> • Greater alignment of I+IT investments with business strategies and vendor capabilities • Development of a detailed portfolio, program and project plans that will help management pursue successful business improvement opportunities • Set and manage expectations, achieve short-term wins and achieve long-term benefits • Help business and I+IT prioritize I+IT investments, and identify resources needed to make the investments • Hone in on high impact and high transformational opportunities for technology within the OPS 	
<u>Central Agencies I&IT Cluster (CAC)</u>	<u>Architecture, Information Management & PMO Branch</u> <u>Dashboard for OPSdocs reporting and analytics using PowerBI</u> OPSDocs, a Corporate application developed by the CAC Enterprise Application Branch (EAB), is a digital repository and information management tool that is used to store information in a secure, easy-to-find-central location. Using the cloud-based business analytic service PowerBI, a dashboard has been developed by the CAC Project Management Office (PMO) for the OPSDocs implementation team. The dashboard displays implementation effort tracking by cluster, service offering and resource type on a regular (i.e. monthly, quarterly and annual) basis. It allows the implementation team to analyze the effort spent and support decision-making in a timely manner. <u>Tobacco Growth Detection Project</u> The Ministry of Finance (MOF) developed an innovative solution to detect the growth of unregistered raw leaf tobacco across Ontario. The Tobacco Growth Detection Project is based on a model that uses satellite imagery, maps and weather data to identify the potential areas of non-compliance for raw leaf tobacco growth. The solution, which will be implemented in fiscal year 2020-21, has the potential to detect fraudulent overgrowth of Tobacco, improve yield calculations and provide administrative efficiencies and cost savings. The project accelerates and enhances risk and outcome-based decisions, limits business-government interactions (i.e. compliance actions, inspections, multiple data requests, etc.) and prioritizes how inspection resources are deployed based on areas of highest risk.	Liz MacKenzie Chief Information Officer Central Agencies I+IT Cluster Liz.MacKenzie@ontario.ca

Enterprise Applications Branch

Digitizing the Business of Government (ONTrack)

ONTrack is a system that delivers a series of modules to manage the lifecycle of items going to Cabinet, by linking political, policy, operational and financial priorities to streamline government decision-making. It enables items to be tracked, followed and measured through their lifecycle, increasing efficiencies and encouraging smarter cross-collaboration across the OPS. The system stabilizes financial submission processing—enabling the decommissioning of the Corporate Database System (CDS)—and allows the tracking of meeting agenda items against key activities. To date, 193 user stories have been completed and implemented, and 1225 users are registered on the system.

InsideOPS

InsideOPS is the enterprise intranet for over 60,000 OPS staff, hosting both enterprise content and content from all ministries. It has been migrated to Azure Cloud from MyOPS to improve the stability, performance and search experience for users. The system delivers cost effective solutions, while demonstrating how Agile and DevOps principles can be implemented within the OPS. Migration of all enterprise content to InsideOPS was completed, allowing for the decommissioning of MyOPS and providing higher stability and performance through Azure. Since launching, the number of page views has surpassed 30 million with an average of 100,000 per day.

eApprovals Implementation

CAC successfully carried out the implementation of eApprovals, a modern and flexible approval workflow system, across all ministries. The implementation of eApprovals standardizes the linear approval workflow tool and process, making reviewing and approving documents easier, faster and more efficient than before. The system allows business partners to effectively manage and deliver services to Ontarians while working remotely, replaces the traditional approval process with an easy-to-use browser-based application, and improves user experience with the automation of repetitive tasks, better security and more consistent reporting of approval status across the OPS. eApprovals has now been made available for access without VPN. The number of packages created since March has nearly doubled—with over 9,000 packages created to date.

Cluster Applications Branch

COVID-19 Pandemic Mitigation

In response to the COVID-19 pandemic, the Cluster Applications Branch (CAB) provided IT solutions to enable the Ministry of Finance (MOF) to implement various tax, administrative, and relief measures. These measures focused on:

- Alleviating the burden on businesses of having to file returns and remit taxes;
 - Waiving penalties and interest on several provincial taxes for the period of April 1, 2020 to August 31, 2020.
 - Increasing the Employer Health Tax exemption limit for the 2020 reporting year.
 - Adjusting the International Fuel Tax Agreement tax, interest and penalty assessments for the period of April 1, 2020 to August 31, 2020.
- Providing financial supports and relief to vulnerable individuals;
 - For Seniors: Doubling the Guaranteed Annual Income System (GAINS) payments for seniors beginning April 2020 for a six (6) month period.
 - Adjustments to match Federal approaches: ensure payments continued when the CRA 2019 tax filing date changed to June 1, 2020 and aligning the annual renewal approach with the Federal approach for Guaranteed Income Supplement and Old Age Security COVID-19 measures.
 - For Housing and Dental benefits: Eliminated the need to submit renewal applications and paper consent by automatically enrolling existing recipients in the new benefit year for Healthy Smiles Ontario, Investment in Affordable Housing and Canada Ontario Housing.
 - For Income Testing: Adjusted IT solutions to enable MOF to ensure continuance of the income tested social benefits administered by MOF, for programs in MOF and other ministries.
- Suspending or significantly reducing compliance lines of business such as collections, audit and inspection activities in light of public health directives and economic conditions.

Aviation Fuel Northern Rate Change

In response to the 2019 Fall Economic Statement, the Aviation Fuel tax rate for northern Ontario was reduced effective January 1, 2020. As there is greater reliance in the North on air freight, the reduced rate resulted in reduced costs of living and

essential goods such as groceries and air travel. This change automated tax reduction for aviation fuel sold in northern Ontario.

Canada Ontario Housing Benefit

The Ministry of Municipal Affairs and Housing (MMAH) partnered with the Ministry of Finance (MOF) in support of the government's commitment to implement a province-wide portable housing program supporting the housing needs of vulnerable low-income Ontario families. The Canada-Ontario Housing Benefit Program (COHB) was negotiated and co-designed with the federal government (Canada Mortgage and Housing Corporation), under the National Housing Strategy, which is a bilateral agreement between Ontario and the federal government. COHB is a successor program to the existing Portable Housing Benefit – Special Priority Program (PHB-SPP) program.

Implemented in April 2020, MOF and Central Agencies I&IT Cluster (CAC) provided Automated Income Verification and Business Services (AIVBS) for COHB, to determine eligibility and entitlement for the program, and to ensure the program supports targeted low-income Ontario citizens. MOF and CAC included Business Services, such as application and consent management, payments for the benefit issuance, Federal T5 reporting, and tracking and reporting in support of the overall program administration.

Identity and Access Management Branch

Public Secure Pilot Implementation

Pilot is now integrated with four (4) business applications: MCCSS MyBenefits, MCCSS Family Responsibility Office (FRO), MECP's Permissions Enterprise Platform (PEP) and MECP's Compliance Re-engineering Information Systems Project (CRISP). For the past 4 months, we've averaged about 220,000 logins per month.

Public Key Infrastructure Stabilization

CAC has upgraded the GO-PKI infrastructure and applications to stabilize the service to ensure continued network access for servers and PCs and continued secure access to business applications for over 100,000 users. To

date, over 200,000 certificates were upgraded to stronger security standards with little downtime for users and over 100 business applications were migrated, including applications for social assistance (SAMS) and child protection (CPIN). The upgrade improves efficiencies and effectiveness while lowering operating costs of Government infrastructure.

Business Services & Management Branch

Improving OPS robotic technologies to improve business processes

The Central Agencies I&IT Cluster (CAC) in partnership with the Government Services Integration Cluster (GSIC) and Enterprise Financial Services Division (EFSD) are collaborating to implement an innovative solution that leverages existing OPS robotic technologies to improve business processes in CAC. A proof of concept was completed successfully, and work is proceeding on a production version.

IT Source

Vendor of Record Replacement (VORR) Project

In Summer 2019, Treasury Board Secretariat and the Ministry of Government and Consumer Services received Treasury Board /Management Board of Cabinet approval to introduce a new MSP model in Ontario for buying temporary IT contractor services. The MSP model will streamline processes, lower costs for bidders and government, create efficiencies, and expand potential opportunities for vendors. The MSP model supports the implementation of key service improvements and is consistent with broader Ontario initiatives such as Open for Business, the Supply Chain Centralization Smart Initiative and digital transformation initiatives.

A competitive procurement was conducted and Flextrack Inc. was identified as the successful MSP vendor. As a managed service provider, with a Vendor Management System (VMS) to support and automate the resource acquisition activities and workflow, Flextrack streamlines the processes surrounding contingent workforce acquisition, providing mechanisms to meet client resourcing demand, acquiring and managing IT consulting talent and optimizing consulting costs. Flextrack also provides access to talent, with a critical review of client requirements for specific engagements. In alignment with Ontario Procurement Directives, a deliverables-based approach will be introduced to the contingent workforce processes, from business case approvals to managing the related procurement and financial records.

	<p>New, innovative ways of delivering back- office services are also being introduced through the development of Robotic Process Automation (RPA) which automates purchase order requisition and invoice creation.</p> <p>The MSP project team has adopted a hybrid-agile approach and best digital service practices, to deliver value rapidly, while engaging closely with the client community. The project team has established a dedicated Change Network with MSP change agents from all client organizations, in support of this complex business and technology transformation. In addition, Ontario and Flextrack have held a series of Vendor Information Sessions to share information on the MSP model and initiate the process of registering suppliers with Flextrack.</p> <p><u>LearnON-Single Sign-ON</u></p> <p>A true enterprise solution, LearnON is a Learning Management System (LMS) Software-as-a-Service Solution that is used by over 72,000 employees in the Ontario Public Service through a centralized and rationalized common tool suite and learning services. The LearnON Single Sign On project was successfully completed to improve the user experience and increase LearnON adoption, while enhancing security, reducing the number of incidents and streamlining solution administration. With the implementation of Single Sign On, users can access the system when logging into their computer with their Ontario.ca email and without having to login to LearnON again, making learning offerings easily and quickly accessible. Single Sign On eliminates access barriers, streamlines customer experience and reduces the organizational service management cost through reduced need for login troubleshooting. The introduction of LearnON Single Sign On has supported an increased adoption of the system across the OPS, measured through an increase of approximately 8% for new account requests since October 2019. In addition, a 75% reduction in password reset incident tickets was demonstrated after October 2019, showcasing an improved user experience.</p>	
<p><u>Cyber Security Division (CSD)</u></p>	<p><u>Ontario Public Service (OPS) Cyber Security Strategy</u></p> <p>In July 2019, the government approved the Ontario Public Service Cyber Security Strategy. Over the next 3 years, the strategy will support the transformation of the way digital services are delivered, enhance current cyber practices and safeguard the sensitive and private personal information entrusted to the province by people and businesses in Ontario.</p> <p><u>COVID Support</u></p>	<p>John Roberts, Chief Privacy Officer, Archivist of Ontario and Chief Information Security Officer, Information, Privacy and Archives Division and Cyber Security Division john.roberts@ontario.ca</p>

The urgency of Ontario's response to COVID-19 meant that fast-tracked technology solutions required urgent security guidance/assessment, secure design advice and testing. At the same time, a global 667% increase in COVID-19-related phishing threats¹ from the month of February demanded even more vigilance and education to protect the OPS network and support Broader Public Sector (BPS) partners.

- The Cyber Security Operations Centre blocked over 500 indicators of compromise related to COVID-19 in the OPS.
- The Cyber Security Operations Centre provided advice and guidance for 10 BPS cyber incidents since the beginning of March.
- Provided Cyber Risk Assessments and Secure Design advice for 57 COVID-19 related IT solutions from across all clusters.
- The Ethical Hacking and Vulnerability Management team worked around the clock to complete penetration testing on time for seven public-facing COVID-19 websites.

To combat the rise in pandemic-related cyber threats, the Education & Centres of Excellence (ECOE) team aimed to raise awareness of existing and emerging cyber threats to the OPS and Broader Public Sector (BPS) and help BPS cyber security practitioners understand and prepare for these threats.

- Engaged with BPS partners through weekly Cyber Community of Practice Calls as an ongoing response to the pandemic.
- In April and May there was a 300% increase of attendees for internal OPS wide Cyber Security Awareness webinars.
- Key leads from cyber security appeared at multiple "Ask Me Anything" sessions to answer OPS staff questions on how to work remotely safely and to give tips and advice on how to be cyber savvy during COVID-19.

Cyber Security Centre of Excellence for the Broader Public Sector

As part of the government's efforts to address the cyber security challenges faced by public sector organizations, Ontario has established a Cyber Security Centre of Excellence (COE) for the broader public sector in 2019. The COE is a key pillar of the Ontario Public Service (OPS) Cyber Security Strategy approved in principle by TB/MBC in July 2019.

	<p>The COE supports ministries and broader public sector service delivery partners. We provide advice, guidance, information sharing and services to strengthen digital resilience and improve Ontario's cyber security posture.</p> <p>As part of the COE services, Ontario has introduced the Cyber Security Community of Practice, to connect broader public sector and municipal stakeholders together with Cyber Security Division experts to discuss:</p> <ul style="list-style-type: none"> • The latest cyber security news and threats • Answer questions related to cyber security from participants • Solicit feedback on cyber security topics of interest from participants <p>The Community of Practice calls aim to create a space for cyber security practitioners across the province to share information on cyber events, to share experiences when dealing with cyber incidents and to have an open forum to discuss ideas on how to keep systems, processes and people cyber resilient.</p>	
<p><u>Children, Youth and Social Services Information and Information Technology Cluster (CYSSC)</u></p>	<p><u>Our Response to COVID-19:</u></p> <p>We had a special role to play in supporting our staff, our business partners and the people of Ontario during the pandemic, as we transitioned into working remotely and ensuring business continuity.</p> <ul style="list-style-type: none"> • We built an Emergency Assistance Application for Ontarians in two weeks • We saw 70% more MyBenefits users, a multi-channel social assistance application that allows users to access their information and report changes • Our Social Assistance Management System extended hours to ministry and municipal staff to help them better serve the public <p><u>Ontario Autism Child Information System (OACIS)</u></p> <ul style="list-style-type: none"> • Implemented OACIS in April 2019 to support the Centralized Intake and Registration Team for the Ontario Autism Program (OAP) in processing application from families of children with autism. 	<p>Aklilu Tefera Chief Information Officer and Assistant Deputy Minister, Children, Youth, and Social Services I&IT Cluster Aklilu.Tefera@ontario.ca</p>

	<p><u>Social Assistance – MyBenefits</u> MyBenefits is a digital mobile solution that enables Ontario Disability Support Program (ODSP) and Ontario Works (OW) clients to check the status of their benefits and self-report any changes to their income and information.</p> <ul style="list-style-type: none"> • In 2019-20, we introduced additional features to move new and existing users to paperless by default; view and download proof of social assistance status; update phone numbers; change their communication preference and see overpayment balances, as well as a balance breakdown <p><u>Electronic Document Management (EDM)</u> EDM enables Ontario Disability Support Program (ODSP) and Ontario Works (OW) staff to quickly access digital documents and frees up time to help Social Assistance recipients access support. In 2019-20, we digitized 28 million pages.</p> <p>In 2019-20, the final Ontario Disability Support Program Offices onboarded to EDM and all ODSP offices are now live. For Ontario Works offices, we brought on board five offices and cleaned out seven file rooms.</p>	
<p><u>Community Services I+IT Cluster (CSC)</u></p>	<p><u>Digital Curriculum Platform</u> The Ministry of Education has changed how it makes curriculum available to better reflect how Ontarians consume information.</p> <p>The new Digital Curriculum Platform communicates what Ontario students are required to learn by making curriculum and learning resources more transparent to parents, educators and the public. It also provides an easier and faster method for the ministry to revise curriculum and update/post learning resources.</p> <p>The platform is a digital space where anyone can access curriculum and learning resources. This platform helps parents, students, and teachers see connections between learning in different grades and subjects in a user- and mobile-friendly manner and will become increasingly interactive over time. On June 23, 2020, the Premier and Minister of Education announced the launch of the new math curriculum that is hosted on the digital curriculum platform. The platform will grow steadily with more content and features, in line with user needs and feedback.</p>	<p>Soussan Tabari, Chief Information Officer, CSC (416) 326-8216 Soussan.Tabari@Ontario.ca</p>

Support for Families

On March 25, 2020, the government released *Ontario's Action Plan: Responding to COVID-19*, which included funding to families to support child care and education-related expenses during the period of school closures. The funding would support families for the total population of 1,680,000 children aged 0-12 and 335,000 individuals with special needs up to 21 years of age.

The Community Services I&IT Cluster (CSC) implemented the Support for Families solution by utilizing rapid development and agile methodology, and by leveraging an existing platform called “iACCESS.” CSC also developed an interface with the enterprise Integrated Financial Information System (IFIS) to support the seamless delivery of funds to parents in partnership with the Ministry of Education (EDU), Infrastructure Technology Services (ITS), Corporate Security Division (CSD), Ontario Digital Services (ODS), Accountant General Office (AGO), and Service Ontario (SO).

Within twelve days of the action plan’s release, CSC developed and launched a comprehensive application. Leveraging existing platforms but new payment methods, the site saw a record 250,000 applications in 24 hours. Program application processes were further streamlined, as approximately 300,000 Support for Parents initiative (school strike period program) applications had already been verified and were therefore eligible for payment through direct deposit. These applications were transferred to Support for Families (SFF) system, which were automatically eligible for payment without resubmitting to the Support for Families Program.

The SFF program was opened to public on April 6, 2020 and since then approximately 1.66M applications have been received through the online system and approximately 1.6M applications have already been processed to pay close to \$300M to the families of Ontario children. The payments to the parents are largely being made through Electronic Funds Transfer (EFT). Through this initiative the Ontario Public Service has, for the first time, used email transfer for fast and secure payments to parents.

Education Quality and Accountability Office (EQAO)

In March 2019, the Ministry of Education committed to working with EQAO to modernize the agency and its processes including the continued assurance that EQAO's systems and data assets are secure. This modernization program identified three areas of focus in partnership with the Community Services I&IT Cluster (CSC):

- Migration of the Agency's infrastructure footprint to the Government's Guelph Data Centre to realize operational efficiencies and ensure the ongoing security of EQAO's systems and data holdings. Phase 1 of the migration was completed in January 2020 in collaboration with Infrastructure Technology Services (ITS).
- Development and implementation of the Mathematics Proficiency Test (MPT) for teacher candidates in Spring 2020 to strengthen math education in the province coinciding with the release of a new elementary math curriculum. CSC supported the Agency in developing the program logic models to implement the assessment as well as assessing the security and privacy controls within the vendor-managed solution. CSC was also actively engaged with the Ministry of Education in designing the processes for the MPT test administration.

Support and expertise provided in development of a procurement mechanism for digital assessment and scoring, as it is recognized that students are learning in a more technology-driven environment. Consequently, the way in which student learning is assessed needs to be modernized.

Serious Occurrences Reporting /Residential Licensing (SOR-RL) Modernization

In 2015, a Residential Services Review Panel was established in Ontario to conduct a review of the child and youth residential services across all sectors (i.e., youth justice, child welfare, mental health and complex and special needs). The review analyzed the needs of children and youth in residential settings with a focus on approaches to effective treatments, programs, and services as well as placement, care and treatment methods in residential settings. In 2016, the Panel delivered their final report and recommendations, *Because Young People Matter: Report of the Residential Services Review Panel*.



The highlighted Report determined that a modernized IT solution would automate, simplify and consolidate end-to-end residential licencing processes to support many of the recommendations outlined in the Panel's report, namely:

- The creation of a centralized, publicly accessible, web-based directory of all licensed service providers to support placement decision-making
- Developing capacity across residential services for data collection and reporting on the number of young people in out-of-home care within specific cultural, racial, faith, or gender groups
- Integrating data across existing databases
- Enabling the use of Business Intelligence (BI) to conduct extensive trend and comparative analyses to aid in developing benchmarks and performance targets
- Contributing to a proactive strategy to ensure the rights, well-being and participation of young people is promoted – especially for young people with complex and special needs.

Due to the strong alignment of the proposed solution with the existing Child Care Licensing System, ministry partners had engaged the Community Services I&IT Cluster (CSC) for the development of an IT solution to address the Panel's recommendations. Since project approval, release 1.0 was completed and went live in November 2019. It enabled service providers to submit serious occurrence reports using web portal and allowed the ministry to electronically process them. There are approximately 6,200 service provider sites present in the system with around 9,000 external users and 900 ministry staff who have access to the system.

To date, approximately 30,000 serious occurrence reports have been submitted. Release 2.0 of the project was launched in February 2020 and it enabled end-to-end lifecycle management for a residential licensed site. This further added approximately 530 licensed sites and has improved the communication, data quality and ministry oversight for all residential licensed sites. Release 3.0 of the project went live in May 2020 enabling data sharing with existing business intelligence group and allowing the ministry to see data trends which will help in enabling better-informed decision-making.

Broadband Modernization Program (BMP)

The goal of the multi-year Broadband Modernization Program (BMP) is to provide a fast, reliable and secure level of broadband connectivity in schools to all Ontario students and educators – including those in rural, remote and northern areas.

The target speed is 1 megabit per second per student (1 Mbps/student), understanding the need for scalability to address the anticipated increased growth in internet usage in the future. That means school board (board) networks will be able to adapt to future increased bandwidth needs of technological advancements in the learning environment. This speed was re-confirmed for school-year 2020-21 and in partnership with boards, will be reviewed during the year to ensure it meets the needs of increased use of digitally enabled learning (as educators became more comfortable with the approach through the school closure period).

This is the target speed noted in the Ontario Association of School Business Officials' (OASBO's) Manifesto for 21st Century Learning report in 2013 and the 2017-18 target set by the State Education Technology Directors Association (SETDA) in the U.S., as adequate for an elementary/secondary (K-12) learning environment. Further analysis confirmed this is an adequate target based on the download wait times of average course work. Based on the information collected by the boards in spring of 2016, the data indicated that the majority of boards were operating below this threshold.

This program is implementing software-defined wide area network (SD-WAN) technology and a base level of network security in full collaboration between the ministry and school boards. The initial focus was to start small by upgrading a limited number of schools with representation from English, French, public and Catholic boards across all regions of the province to create learnings for application to future work. These learnings informed the strategy and approach for the full roll-out which started in August 2017.

As of June 30, 2020, 41 school boards/authorities and more than 2,200 schools have completed their modernization work, impacting more than 821,000 students, and including 755 rural schools and 461 northern schools. There are 38 additional boards in implementation, which means that they have completed the design phase, and subsequent procurement and deployment activities are underway to implement the

updated broadband network design. Within the 39 school boards, more than 1,226,000 students, 338 rural schools and 40 northern schools are included.

Work is continuing with nine boards to identify requirements to sustain network infrastructure beyond the end of the program with recommendations anticipated by year-end.

Upcoming planned activities will be informed by the current implementation and will focus on the completion of the remaining boards, and continued discussions on how to address sustainment beyond the program's end-date.

Ontario Student Assistance Program (OSAP)

(Lighthouse project)

Ontario Student Assistance Program (OSAP) is a flagship program of the Ministry of Colleges and Universities (MCU). OSAP is responsible for administering both provincial and federal student financial aid programs for Ontario students undertaking postsecondary studies.

OSAP provides eligible Ontario students with financial aid to help pay for education-related costs such as tuition, books, living costs and transportation. In addition, OSAP provides repayment assistance options when students have completed their studies. Financial aid includes over 20 funding instruments and can come in many forms: grants, bursaries, scholarships, fellowships, debt reduction, interest relief, work study or loans.

OSAP program is a mobile friendly web-based solution that contains over 50 applications and sub-systems to support data collection and application processing for three active academic years and data viewing for all historical years. OSAP is used by over 3 million Ontario students, hundreds of ministry staff and over 3,000 financial aid agents in over 2,000 financial offices across over 2,000 universities and colleges over the world.

Over the past 12 months, there have been over 44 releases across all major applications and sub-systems to support government priorities, policy changes and enhancements. This included changes to address policy changes related to the COVID-19 pandemic. On March 25, 2020, the province released *Ontario's Action*

Plan: Responding to COVID-19, which included support for the postsecondary sector through a 6-month temporary deferral of student OSAP payments and interest accrual. Within one day of the announcement, the ministry was able to deliver a requested change to the OSAP application. On average, the government receives about 500,000 OSAP applications for OSAP grants and loans each year. It is anticipated that the temporary deferral of OSAP payments and interest accrual will benefit a significant subset of the OSAP recipients.

Also, a total of seven simulations were run for evidence-based decision-making for the policy change due to COVID-19. In addition, CSC rolled out a number of releases for the 2020-21 academic year (releases 1 to 4) between May and August 2020.

In addition, an enhancement was made to the system to allow students to use digital signatures and add password protections to documents required for the confirmation of enrollment. Students can now send documents to their post-secondary institutions for signature by email and upload signed and password protected documents online.

GIS maps to enable decision-making for education, during the COVID-19 pandemic

Identify potential gaps with all Ontario students' Internet access

On March 12, 2020, the Ontario government announced that all publicly funded Ontario schools would be shut down to protect the health and safety of students and staff from the COVID-19 virus. To support continuous learning for Ontario students during the pandemic, all students should have internet access to educational sites such as the Ministry of Education's *Learn at Home* program.

Geographic Information System (GIS) maps and spatial analytics were used to identify the potential gaps in relation to broadband availability for students' home access. The Ministry of Education's data on student postal code locations, schools and the federal National Broadband Datasets were used in the GIS spatial analysis and modelling to identify student concentration areas with no or low internet connectivity.

The GIS maps and data results enable the Community Services I&IT Cluster's (CSC's) Broadband Modernization Team to provide better and accurate decision-making on broadband implementation projects. This will support ministry and

	<p>government priority efforts related to equitable access. On June 3, 2020, the Ontario government announced that \$150 million would be invested in reliable broadband and cellular services.</p> <p><u>Use of GIS maps and spatial analytics to plan and monitor the school re-opening of the remaining 2019-20 school year.</u></p> <p>Since the closure of all publicly funded Ontario schools on March 12, 2020, the Ontario government has been planning and monitoring the safe re-opening of the remaining 2019-2020 school year. CSC collaborated closely with the Ministry of Education to develop and analyze safe school scenarios using spatial and statistical analysis.</p> <p>GIS maps and an interactive web application were created to analyze and monitor the impact of COVID-19 hotspots and confirmed positive cases in relation to all Ontario schools and student postal code locations.</p> <p>The Public Health Unit (PHU) confirmed positive case data at a Forward Sortation Area (FSA) which was spatially integrated and updated daily with automated GIS scripts to provide the latest information and analysis for senior-level decision makers. On May 19, 2020, the Ontario government announced that schools would remain closed until the end of June 2020 since it was still unsafe for students to attend school based on the COVID-19 data analysis.</p>	
<p><u>Government Services Integration Cluster (GSIC)</u></p>	<p><u>Contact Centre Modernization Initiative (CCMI)</u></p> <p>First year activities of the Contact Centre Modernization initiative (a multi-year plan to reduce and/or eliminate duplicative and inconsistent processes and technology) were completed.</p> <p>Key outcomes of the overall initiative: Implementation of the next generation contact centre business model enabling the Ontario Government's commitment of Building A Smarter Government and offer best in class phone, email, online chat and two-way messaging options and services to help Ontarians get information faster and with more ease.</p>	<p>Renee Laforet, Chief Information Officer, Government Services Integration Cluster renee.laforet@ontario.ca</p>

Launch of Support for Parents

In partnership, with Community Services Cluster/Ministry of Education launched a contact centre (technology / staff) to enable a support fund for parents with school aged children, within 3-weeks, promoting the Ontario Government's commitment for service excellence and fostering a "How May I Help You?" approach. This enabled services to be provided to 1.5M affected children and 700K+ parents

COVID19: Maintaining & Expanding Contact Centre Services

With COVID-19, the need to access information online and receive support via the contact centres exponentially increased as volume from in-person channels was reduced because of physical distancing considerations. The need to also support physical distancing within contact centre operations created an additional challenge.

Ensured technical and staffing readiness by sharing messaging and information across contact centres, ensuring capacity and stability on the Enterprise Contact Centre Solution (ECCS) to handle the additional call volume, agility in setting up new contact centres within 24-96hrs, and making design changes to enhance services while also prioritizing the distribution of equipment to support staff to ensure the ability to work from home to maintain service continuity.

A strong partnership with ITS, all clusters and every program area was essential to ensure success.

Key Outcomes:

- Up to 2100 contact centre staff handling calls from home
- New Ontario Together, Stop the Spread contact centers implemented within 24 – 96 hours
- New programs such as Support for Families, Emergency Assistance for Social Assistance, Pandemic Pay, etc., expanding services delivered through current contact centres
- Ensure over 100K contacts daily connected with contact centre staff and subject matter experts across Ontario allowing government to continue to deliver its mission critical and business critical services.

COVID-19: Ontario Together

With frontline health and other workers facing shortages of Personal Protective Equipment (PPE), like ventilators, masks and gloves, the Ontario Together site was used to collect proposals for emergency supplies, ideas and innovative solutions, including donations, to allow Ontario to secure in-demand goods and services and signal to Ontario's manufacturing sector to redeploy capacity to help fight the spread of COVID-19.

- Connecting to the Ontario Digital Service (ODS)-built Ontario Together Portal, the Government Services Integration Cluster (GSIC) team rapidly developed a cloud-based submission management tool (Client Relationship Management - CRM) in partnership with Ministry of Government and Consumer Services, Ministry of Economic Development, Job Creation and Trade (MEDJCT), Ministry of Health & ODS, with technical resources donated by Labour and Transportation Cluster (LTC) & Central Agencies Cluster, along with a contact centre to answer questions 7 days a week with assistance from Infrastructure Technology Services.
- The Client Relationship Management (CRM) tool allows each submission to move to different users across multiple ministries and partner areas so they can add their lens of expertise on each submission.
- Reporting to Deputy Minister, Ministers Office and Premiers Office was very important, so a team of Power BI developers and data experts were assembled from GSIC, LTC, Supply Chain Ontario, and MEDJCT to build and develop dashboards for tracking and reporting.

Key Outcomes:

- More than 24,000 submissions managed, 600 internal users, and 31 PPE purchases by Supply Chain worth over \$105M.

Digital Corporate Employee File

Corporate Employee Files that contain highly sensitive data and are largely paper-based must be managed in accordance with legislated and collective agreement obligations. Managing and processing paper is weighing down HR processing and complicating remuneration and benefits administration.

- Now that OPSDocs is rated for high sensitivity data, GSIC recognized that it could be used to store digital employee records and to enable easy but well-controlled access. OPSDocs provides opportunities for: workflow

	<p>management, document searching, document retention management, system integrations, and scanning of historical records.</p> <ul style="list-style-type: none"> In collaboration with our business partners we will be able to inexpensively and quickly deliver a solution: starting with a 3-month initiative to deliver basic employee file management followed by workflow support associated with Workplace Employee Action Request (WEAR)-form intake. <p>Key Outcome:</p> <ul style="list-style-type: none"> Leaner HR processes with improved access and management of employee records 	
<p><u>Health Services I&IT Cluster (HSC)</u></p>	<p>HSC, in partnership with Ontario Health Digital Services (OHDS), developed two consumer-facing solutions in support of provincial public health response to the COVID-19 pandemic. The Ministry of Health (MOH) and OHDS have created an online COVID-19 Test Results Viewer for the public to access their COVID-19 lab results from the Ontario Laboratory Information System (OLIS). The tool was first made available on April 3, 2020. As of August 10, 2020, ~1.56M Ontarians have accessed their COVID-19 test results through the online provincial Test Results Viewer.</p> <p>By leveraging Alberta's self-assessment tool and, in partnership with Ontario Digital Services (ODS), Ontario created its online COVID-19 Self Assessment Tool (SAT) to support Ontarians who are worried about being exposed to COVID-19 and/or are displaying symptoms. The SAT was enhanced for a follow-up program to (1) bolster capacity for the Ontario public health system to conduct case and contact management and (2) providing support to those required to self-isolate, while also enhancing adherence with public health measures. As of August 31, 3440 Ontarians have opted in the follow-up service since the May 10 launch. An additional 426,553 citizens have completed Ontario's Self-Assessment Tool.</p> <p>To support case and contact follow up, HSC developed Contact+, a voluntary online service that enables Ontarians who have received a positive result via the COVID-19 Test Result Viewer to self-report demographic and other data to Public Health. Launched on May 27, Contact+ supports PHUs to quickly obtain cases' current demographic and contact information, quick start case investigation, and receive risk stratification to help prioritize follow up.</p>	<p>Karen McKibbin Chief Information Officer Health Services I+IT Cluster Karen.McKibbin@ontario.ca</p>

On July 18, Ontario implemented a new **provincial case and contact management (CCM) solution** in an initial wave of four PHUs. CCM supports contact tracing and case management functions for COVID-19 cases managed by PHUs. CCM will allow for integration with OLIS and Contact+ and will enable data extraction and analysis to identify provincewide regional trends and hotspots. This user-friendly system will significantly reduce duplication, speed up processes, allow for more efficient case and contact management work, and supports a remote workforce, enabling contract tracing to be quickly ramped up when required. The new system will phase out multiple tools being used across the province and replace the legacy provincial communicable disease database (iPHIS) for COVID-19. All 34 PHUs and Public Health Ontario are scheduled to be onboarded on CCM by early September 2020.

MOH and the Ministry of Long-Term Care (MLTC) have leveraged Long-Term Care Home RAI-MDS assessment records (IAR) **to match Long-Term Care Homes (LTCH) resident demographic information with COVID-19 lab results in the Ontario Laboratory Information System (OLIS)**. This enabled MOH to develop LTCH COVID-19 line lists that help Public Health Units (PHUs) monitor and manage COVID-19 outbreaks in LTCHs.

Daily Bed Census Summary (dBCS) solution was implemented to collect **hospital utilization data on a daily basis across the Province**. It has helped MOH:

- To better understand the day-to-day bed occupancy rates and use of unconventional spaces in Ontario hospitals.
- To pro-actively manage and respond to capacity pressures and emerging trends.

In support of the government's action in addressing current COVID-19 pandemic situation, **Daily Bed Census Summary was leveraged** to enable additional data and reporting to pro-actively capture pandemic information for **evidence-based decisions to improve COVID-19 related health care service delivery in Ontario**.

The Business Intelligence and Data Analytics (BIDA) platform hosts 65+ different datasets and more than 50TB of data stored in Oracle Exadata appliance with 40GB/second network connections to the application servers. With BIDA's high performance and highly scalable functionality, it was leveraged as the Ministry's centralized COVID-19 related data repository containing OHIP claims, OLIS, PHO, CCO, HSSO, IPHIS, CIHI, IAR, DAD and NACRS datasets, etc. This data is being

provided on regular basis to external researchers from UofT, York, Ottawa, ICES and Deloitte to enable Pandemic Modeling and decision making by the Province.

Business Intelligence and Business Analytics (BIBA) achieved MOH/MLTC Information Management strategy for evidence-based decisions by enabling program areas to discover patterns of care, trends and practical funding models for optimizing health care delivery in the Province. BIBA contains vast volumes of healthcare data encompassing Hospitals, LHINs, CHCs, and Public Health Units, and now COVID-19 data. **IntelliHealth**, an important component of BIBA, provides with authoritative data sources describing the health service experience of Ontarians, and is the main source of clinical & demographic data used to forecast trends in Ontario's healthcare sector.

Implemented **password-protected PDF and email to replace fax transmissions of LTCH inspection reports**. This allows LTCH inspectors to reduce administrative processes, decrease timelines and enable security and privacy of reports which helps to minimize risks at LTCHs to residents.

Implemented **DeliverySlip secure email to replace the fax transmission of forms sent by the Psychiatric Patient Advocate Office (PPAO)** to lawyers, hospitals and other external stakeholders. This allows rights advisors to send communications securely and eliminates the need for workplace printers and fax machines

Computer Aided Dispatch (CAD) Caution Notes for Paramedic Safety: as a result of an Emergency Order approved by Cabinet and the Lieutenant Governor on April 3, laboratories and public health units were required to disclose to first responders upon request a subset of information for person(s) testing positive for COVID-19. Working with Ontario Health's Ontario Laboratory Information System (OLIS) team, the team integrated the data into the Ambulance Dispatch center's Computer Aided Dispatch (CAD) system to enable pre-alerting of Paramedics prior to scene arrival. The integration work was completed while ensuring the highest privacy and security safeguards were in place.

COVID-19 Lab Information Lookup Portal: ORNGE's Occupational Health unit was given access to a secure web tool that was stood up and used to track potential exposure by ORNGE's air medics and pilots to COVID positive patients. The application supports the health and safety of front-line healthcare providers.

Lab Information Systems (LIS) – Ramping Up COVID-19 Test Volumes:

upgraded the Lab Information system to deal with the influx of new laboratory testing requests and a huge increase in volume. HSC worked with PHO, vendors and ITS to increase capacity and deploy LabWare packages to support various critical COVID related needs (new instruments and analysis methods).

The Medical Claims Payment System processes over 380M claims transactions for \$14.1B in payments to approximately 35,000 providers annually in support of the Ontario Health Insurance Plan (OHIP). HSC has worked with OHIP Division to ensure **physicians receive compensation for services provided during this pandemic that are outside of their regular OHIP services.**

- A framework and billing codes for physicians to bill and receive payment for services provided in the 140 (and counting) COVID-19 Assessment Centres, including providing operational area relief through the automated affiliation of physicians to these centres.
- Premiums, billing codes and associated payment rules for services provided in the community including hospitals (outside of the Assessment Centres) and physician offices via teleconference or video. This is a change in practice as OHIP insured services are traditionally provided via face-to-face interaction. This is separate from Virtual Care that is not part of OHIP's insured services.
- Billing codes and associated payment rules for physicians outside of hospitals and Assessment Centres to receive payment for services to patients who are not insured by OHIP to ensure timely treatment of COVID-19 services for patients not traditionally funded by OHIP.

Implemented modifications to the **Ontario Health Insurance Plan (OHIP)** registration system to ensure that citizens who cannot make it in person to a ServiceOntario office due to COVID-19 social distancing requirements continue to have OHIP eligibility.

The Assistive Devices Program (ADP) allows Ontarians with long-term physical disabilities to increase their independence through access to assistive devices responsive to their individual needs. The program provides customer-centered support and funding to Ontario residents who have long-term physical disabilities. In support of the government's recommendations to reduce personal contact, contain the spread of COVID-19 and continue to protect vulnerable populations from

experiencing delays in accessing ADP program benefits, system updates were required.

- Implemented a new fax transmission service for ADP vendor usage to ensure receipt and processing of funding requests during the pandemic. Enabled ADP staff to resume processing ~6000 vendor requests per week.
- Ensured uninterrupted provision of funding assistance for devices and supplies by implementing automatic Grant Renewal Extensions for eligible clients, automatically extended approved ADP claims that were expiring, suspended in-person assessment requirements for home oxygen therapy renewal funding, and removed quantity restrictions on palliative care patients requiring home oxygen.

Assistive Devices Application Management Reporting (ADAM-R)

This application allows for the Assistive Devices Business area to generate operational and payment reports to support Assistive Devices Program (ADP). ADP provides customer centered support and financial assistance to Ontario residents with long-term disabilities to obtain personalized assistive devices and supplies appropriate for their individual needs for over 6 months. The application provides ADP with 80 pre-defined reports and ad-hoc reports to help with the decision making.

The migration project which involved migrating ADAM-R to a shared platform, called BIDA, hosted at Guelph Data Center (GDC) from legacy Sheba II environment was successfully completed on May 20, 2020.

The Health Network System (HNS) is a province-wide 24x7x365 system providing real-time claims adjudication for publicly-funded drugs and pharmacy services. The Benefit Program Client Services (BPCS) application supports the HNS by processing submissions for a variety of programs including the Exceptional Access Program (EAP), Trillium Drug Program (TDP) and the Seniors Co-Payment (SCP) Program delivered under the Ontario Drug Benefit (ODB) program. As part of Ontario's Action Plan to respond to COVID-19, system changes were made to support Ontario's Public Drug Programs:

- Authorizations were extended for patients that have existing EAP approvals. Data extracts were provided to prescribers allowing them to communicate these updates to their patients.
- Supported the government's regulatory amendments under the ODB Act to extend the in-year deductible reassessment process for households under

	<p>TDP. For the 2019/2020 benefit year, which ran from August 1, 2019 to July 31, 2020, households could apply to have their deductible reassessed if their 2020 income was different from their 2018 income by 10% or more, including for reasons relating to COVID-19.</p> <ul style="list-style-type: none"> Leveraged the ODB SCP dataset to identify low-income seniors required to self-isolate in order to connect them with community supports such as grocery delivery services, mental health solutions and other health care needs. <p><u>The Long-Term Care Critical Incident System (CIS)-Inspectors Quality Solution (IQS) integration</u> project automated intake creation in the Inspectors Quality Solution from the Critical Incident System and INFOLine systems. This eliminated the need for the Central Intake and Assessment Triage Team (CIATT) to manually create intakes in IQS. The automation of manual processes reduced administrative data entry time spent on creating intakes and improved efficiency within the CIATT by allowing the team to utilize their time more on critical activities such as triage and clinical priorities.</p>	
<p><u>Information, Privacy and Archives Division (IPA)</u></p>	<p><u>Modernizing Freedom of Information (FOI) Services</u> – Ontario is working on legislative proposals to improve the efficiency of Ontario's FOI services and to provide faster, more reliable access to government information through its access to information programs. Proposals include streamlined FOI processes and procedures, free requests for individuals seeking their own personal information, improved Information and Privacy Commissioner of Ontario (IPC) efficiency, a new exemption for internal audit records, and proactive disclosure. Additional complimentary proposals are being developed to strengthen recordkeeping in the Ontario government.</p> <p><u>Privacy Management Program Model</u> – As a central deliverable in the Privacy Management Action Plan, IPA released the Privacy Management Program Model to privacy practitioners in alpha form (an early version to promote feedback and rapid development) in January 2020. The Privacy Management Program Model presents a scalable program model for privacy management to be implemented within ministries. The program model is centred around accountability and risk management and introduces two new privacy management business processes: privacy maturity assessment reporting and privacy risk management. Three new guidance documents were developed to support the new program model:</p>	<p>John Roberts, Chief Privacy Officer, Archivist of Ontario and Chief Information Security Officer, Information, Privacy and Archives Division and Cyber Security Division john.roberts@ontario.ca</p>

- The Privacy Management Program Model Guideline – outlines the roles, responsibilities, objectives, inputs, activities, outputs and outcomes of the privacy management program model and provides guidance on implementing the program model within a ministry,
- Privacy Maturity Assessment Guideline – outlines roles and responsibilities and provides step-by-step instructions on how to complete a privacy maturity assessment report, and
- Privacy Risk Management Guideline – outlines roles and responsibilities and provides step-by-step instructions on how to identify, evaluate, mitigate and report on privacy risks focusing on the creation and maintenance of a ministry privacy risk register.

IPA has received substantive feedback from privacy practitioners on the alpha release and will be releasing an updated beta version of these guidance documents in late September 2020.

Privacy Management Community of Practice – In June 2019, IPA established a new Privacy Management Community of Practice (PMCoP). The creation of PMCoP was a deliverable from the Privacy Management Action Plan and is a community dedicated to uplifting the practice of privacy management in the OPS. Made up of privacy professionals from within ministries and agencies, PMCoP brings together individuals who work in FOI and privacy offices, IT information management, privacy and security offices, data analytics programs and cyber security for information sharing, training and collaborative development of privacy guidance. IPA has held six meetings so far and meeting topics have included: information management for privacy programs, privacy risk management, privacy maturity assessment, privacy management program model, COVID-19 and privacy challenges and the new OPS data integration framework.

Access and Privacy Foundations E-Learning – The Access and Privacy Foundations e-Learning module will be an on-demand, self-directed, AODA compliant training resource. It will be a key training tool to help strengthen privacy capacity across the OPS consistent with the recommendation made in the OPS Privacy Management Current State Report. With respect to access to information, it is important that every OPS member be aware that most of the documentation we manage in government is subject to the access rights of Ontarians. This results in expectations and processes that every public servant needs to be prepared to

address and which the training module would touch-on. The training is currently in development with an anticipated completion date of September 2020.

The training has been divided into 4 modules that will cover:

- “Overview of FIPPA” is an introduction to FIPPA that will look at the history of the legislation, key principles, themes and government responsibilities
- “Protection of Privacy” covers the legal and practical principles of protecting personal information in government institutions
- “Access to Information” covers the legal and practical principles related to accessing government information

“Pulling it all together” includes relevant and relatable scenarios in which concepts of access and privacy are in play

Updated Directory of Records and Directory of Personal Information Banks Public Websites

Websites for the Directory of Records and Directory of Personal Information Banks were updated and published on February 24, 2020. Data for Personal Information Banks Public website was updated on June 24, 2020 to exclude content that is no longer in existence or are out of date. Data for Directory of Records is scheduled for a later date in 2020.

Integrating recordkeeping into I&IT projects – IPA released the alpha version of a well-designed PRIA (Preliminary Recordkeeping Impact Assessment) questionnaire. It is the first deliverable among a few that are scheduled to be released (either in alpha or beta) by end of March 2021. The PRIA questionnaire is completed at the early concept phase of an I&IT project and will help I&IT projects:

- Determine if the IT solution involves the creation and management of business records
- Identify recordkeeping-related risks and business impacts

Understand how many resources are required for recordkeeping and decide on next steps.

Data Integration – On November 4, 2019, Part III.1 Data Integration (DI) was proclaimed under the *Freedom of Information and Protection of Privacy Act* (FIPPA). On November 5, 2019, O. Reg. 366/19 for DI came into force.

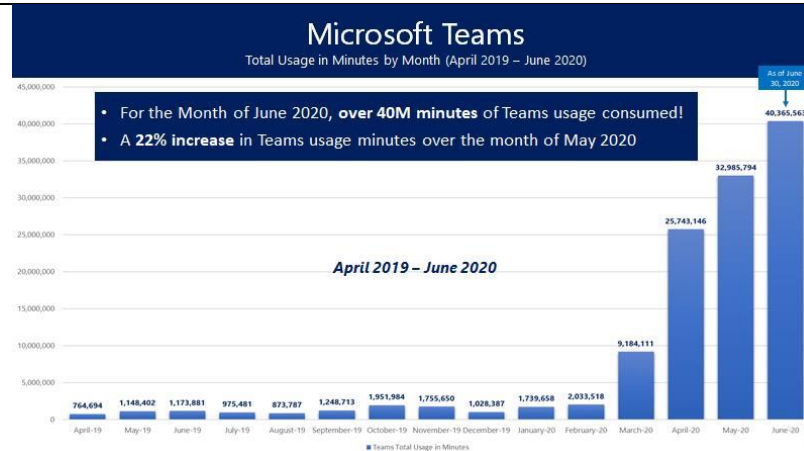
	<p>DI Units have been designated and prescribed in regulation. These units collect personal information for linking to enable access to de-identified datasets for analysis in relation to the management or allocation of resources, the planning for the delivery of programs/services, as well as the evaluation of those programs/services.</p> <p>On March 25, 2020, Part III.1 DI was amended to enable the Ontario Government to empower entities external to the public service (known as Extra-Ministerial Data Integration Units; EMDIUs) to integrate government data in a privacy protected manner. The new amendment outlines the authorities and purposes for which EMDIUs may collect, use, and disclose personal information under FIPPA.</p>	
<p><u>Infrastructure Technology Services (ITS)</u></p>	<p><u>Infrastructure Technology Services (ITS)</u></p> <p>The global COVID-19 pandemic has challenged traditional assumptions regarding disaster preparedness, emergency response and business continuity. Governments worldwide had to quickly reconfigure themselves to focus on public health (e.g. procuring PPE) while also supporting a workforce that had suddenly been shifted home due to lockdown – the Ontario government was no exception.</p> <p>ITS played a significant role in enabling this reconfiguration due to its responsibility for the government's network, infrastructure, computers, mobile devices and critical services such as VPN. In a very short time, changes were made to significantly increase remote work capacity and ensure that government data and services could be securely accessed outside the organization's network. As the government suddenly shifted to a distributed team model, ITS technology, hardware, software and services became the connective tissue holding the organization together.</p> <p><u>Enabling remote work</u></p> <ul style="list-style-type: none"> • In mid-March, the government's Virtual Private Network (VPN) service was quickly scaled up to handle a surge in demand and monitored continuously to ensure optimal performance. By mid-April, VPN usage went from 4,500 concurrent users to 17,547 concurrent users, an increase of 290%. By July, weekly concurrent users had increased to over 22,000. • Beginning in March, thousands of laptops and mobile devices were ordered for time-critical staff identified by ministries. ITS worked closely with vendors to ensure that inventory shortages would not occur, preparing and deploying devices 24 hours a day. By July, over 9,600 mobile devices and 6100 laptop 	<p>Mohammad Qureshi Enterprise Chief Information Officer, Infrastructure Technology Services Mohammad.Qureshi@ontario.ca</p>

orders had been completed. Device patching was also modified to allow computers residing outside the network to receive critical security updates.

- New methods of access were created for critical applications residing inside the government's network (e.g. payroll, financial management and call centre applications). In March and April, ITS deployed innovative new services such as Virtual Desktop Infrastructure (VDI) and Azure's AD Application Proxy to allow staff to access these applications without the use of VPN.

Cloud-based collaboration tools

- The Ontario government's transition to Office 365 was completed in October 2019, with 70,000 active users and 170,000 mailboxes migrated. In January 2020, migration to OneDrive for Business (cloud-based file storage) began for all personal shares. These actions proved to be a significant enabler of the government-wide shift to remote work during the pandemic, because staff were able to securely access files and Office 365 tools from any device.
- While robust training for Office 365 had been in place for some time, demand for training increased significantly during the pandemic, as staff who were accustomed to using traditional methods of interaction (e.g. in-person meetings, teleconference) had to quickly adapt to new tools (e.g. videoconference). The O365 team extended training that was scheduled to be complete at the end of March and worked with internal communications teams and vendors to provide a variety of new training resources, from tip sheets to webinars. Existing training materials were also reviewed and revised to focus on staff needs while working remotely.
- The pandemic drove a phenomenal surge in adoption and usage of Office 365 collaboration tools (chat, audio/videoconference and file sharing). By April, there was an increase of 108% active Microsoft Teams users, going from 10,000 to 25,000, and an increase of 1400% for the number of meetings and calls a day, going from 400 to over 4,500. In the month of June, OPS staff had spent over 40M minutes on Teams (see graph).



Rapidly deploying end-to-end services

- As part of the government's effort to clearly communicate new rules designed to protect the public during COVID-19, call centers had to be rapidly deployed and scaled up to handle questions following major announcements.
- For example, the Ontario Together and Stop the Spread call centres were created to accelerate procurement of critical items and support businesses during the lockdown. Both of these call centres were set up by ITS in less than 48 hours, with fully trained staff and comprehensive documentation for handling calls. Another rapidly deployed call centre, Support for Parents, was set up to provide information to families.
- At launch and following major announcements, ITS had to prepare for massive surges in call volume by deploying Service Desk analysts to call centres. On average, Stop the Spread had 45 analysts deployed every day to handle 9,179 calls in the first 10 days. Similarly, Support for Parents received 9,410 calls in 21 days, with an average of 18 analysts supporting that call centre.

Supporting rapid application scaling and deployment

- Faced with new business challenges, ministries swung into action and engaged their I&IT partners to develop new applications to support Ontarians during the pandemic. Other ministries were faced with a surge in demand and needed scaled-up technology environments to continue their work. As an

	<p>infrastructure provider, ITS was able to rapidly deploy and scale up environments for ministries delivering critical services.</p> <ul style="list-style-type: none"> For example, Public Health Ontario (PHO) labs were experiencing delays in syncing COVID-19 reports from local computers to their servers, due to capacity restrictions and the high volume of test results. ITS worked quickly to set up additional servers for PHO and enable monitoring to reduce the likelihood of future bottlenecks. The new capacity provisioned by ITS removed the bottlenecks and helped to clear the backlog, while mitigating the risk of performance degradation in the future. <p><u>Deploying innovative AI services</u></p> <ul style="list-style-type: none"> Prior to the pandemic, ITS had already been exploring the use of IBM Watson Assistant, a Software as a Service (SaaS) technology that uses AI to handle customer inquiries. In February 2020, an Enterprise Virtual Assistant (EVA) chatbot was rolled out to handle common IT inquiries from OPS staff (e.g. how to get a VPN account). <p>The rollout of EVA resulted in a 21% call deflection rate to the IT Service Desk and positive user experience results. ITS is now exploring public-facing opportunities for AI-driven chatbots, including testing its performance with high-volume ServiceOntario services (e.g. driver and vehicle)</p>	
<p><u>Justice Technology Services (JTS)</u></p>	<p><u>Justice Services Online Expansion</u></p> <p>On August 5, 2020 the Justice Services Online (JSO) platform was expanded to enable the online submission of close to 400 types of civil and family court documents.</p> <p>The new services, “Civil Submissions Online” and “Family Submissions Online” will provide a simple and quick way to electronically submit court documents, at every step in a case, in any new or existing:</p> <ul style="list-style-type: none"> Civil action or application in the Superior Court of Justice Family proceeding in the Superior Court of Justice or Ontario Court of Justice <p>Users can pay court fees online securely by debit or credit card. Individuals can also use the system to request a fee waiver certificate or submit documents with an existing fee waiver certificate.</p>	<p>Catherine Emile (A) Chief Information Officer/Assistant Deputy Minister Justice Technology Services catherine.emile@ontario.ca</p>



By making it possible to submit most court documents online, the Ministry is increasing efforts to protect the health and safety of Ontarians by reducing the need to attend a courthouse in person.

Justice Services Online was launched in 2017 beginning with Civil Claims Online followed by Family Claims Online in 2018. Features and functionality have been implemented over time including integration to case management systems, auto-issuing documents and end to end divorces to list a few.

- % of civil proceedings received electronically increased from 50% in February 2020 to more than 98% in May 2020
- % of simple and joint divorce applications received online for family court increased from 30% in February 2020 to 91 % in May 2020

Criminal E-Intake Expansion

Criminal E-Intake is a safe and secure online solution that integrates Police records management solutions with Ontario's criminal court case management legacy mainframe application, and a judicial web portal. The project went live in Fall 2019 as a pilot in Barrie region (which includes Barrie municipal police, OPP Orillia division, Barrie and Orillia courthouses).

The solution gives police officers the ability to electronically send charge packages for review and consideration by a justice of the peace—saving police, the ministry, and the court time and money associated with the current manual, paper-based, and in-person processes.

In July 2020, the pilot was extended to 5 OPP detachments at Collingwood, Huronia West, Nottawasaga, Collingwood and Aurora. Approximately 80% of charge packages eligible for submission are being submitted electronically at those locations. More than 75% of the users (including Enforcement Officers and court staff) interviewed at pilot locations provided positive feedback and confirmed that the application provided the much-needed efficiency and virtual mechanism of exchanging charge packages.

COVID-19 RESPONSE

Virtual Courts

To keep Ontarians safe and uphold the administration of justice during the COVID-19 outbreak, new and innovative ways of delivering justice remotely and online were established. Ontario courts have implemented virtual court appearances using video or audio conferencing as well as a hybrid of both for all pre-trial in-custody matters. This included:

- 150 new “Virtual Courts” video bridges enabling 900 concurrent users and 450 dedicated audio lines for none video participants to access the bridge.
- 400 teleconference lines for the Ontario Court of Justice
- 200 teleconference lines for the Superior Court of Justice
- As of May 2020, 99% of inmate court appearances are conducted via Hybrid or dedicated video conferencing (significant reduction in inmate transportation)
- As of June 2020, volumes of virtual video calls have doubled averaging 500 video calls per day
- Hybrid audio teleconference & video conferencing has increased by 47% since June 2020 with an average of 1100 calls per day

Initial efforts have focused on criminal court appearances for pre-trial in-custody matters. Work is also underway to support all types of court appearances.

Broader Public Service (BPS) Critical Resource Tracker

The BPS Critical Resource Tracker was developed to securely collect and store inter-jurisdictional frontline critical resource availability information in order to inform COVID-19 response planning.

After 3 weeks of iterative development and testing, the tool was launched on April 21, 2020 providing the means for the Ontario Provincial Police (OPP), municipal and First Nations policing, as well as fire and emergency management services to submit frontline resource availability to the ministry via an online eForm.

The tool also provides a feedback mechanism for the BPS to request Personal Protection Equipment (PPE) and other necessities and to highlight issues that may

	<p>impede their COVID-19 response capabilities. Via the eForm, data is collected and automatically made available through a secure Power BI Cloud Service where it is aggregated for business intelligence reports and dashboards with interactive visualizations for executive decision makers, including provincial COVID-19 Command Tables to identify areas that can operate with a decreased capacity or where resources can be reassigned, if necessary, within government.</p> <p>The tracker collects and reports on information supplied by the OPP, 47 municipal and 9 First Nations Police Services, 441 Municipal Fire Services and 444 Emergency Operations Centres.</p>	
<p><u>Land and Resources I&IT Cluster (LRC)</u></p>	<p>Parks Reservation and Registration Service (PRRS) (MECP) The Ministry of the Environment, Conservation and Parks (MECP) manages 329 Ontario Parks through protection, conservation, education and providing recreation opportunities including: camping, hiking, canoeing, swimming, skiing, snowshoeing and nature viewing. MECP has partnered with the Land and Resources I+IT Cluster to replace the existing reservation and registration system with a modern online digital service and tools for ministry business intelligence and revenue management. The PRRS launched November 2019 and further releases have been implemented to streamline and enhance the user experience.</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Faster and easier public access to Ontario Parks information, registration and reservations. • 24-7 online access to services and information on any device (mobile). • Streamline public experience at parks (check-in, permits, vendor). • Additional improved digital Parks Ontario services and functionality (all sites available for reservation). • Improved ministry data, reporting and business intelligence. <p><u>AgriSuite Modernization (OMAFRA)</u> The Ministry of Agriculture, Food and Rural Affairs (OMAFRA) provides calculator tools and resources for use by farmers, environmental and agricultural professional and ministry staff to support the Nutrient Management Act, 2002 and Minimum Distance Separation guidelines. This project will modernize the AgriSuite application and 10 environmental calculators with a mobile-enabled digital user experience and launch 2 new calculators (Phosphorus loss and greenhouse gas emissions) by</p>	<p>Rocco Passero Chief Information Officer Land and Resources I&IT Cluster Rocco.Passero@ontario.ca</p>

December 2021 to promote scientifically sound agronomic, environmental and land-use practices. Project has publicly released the first four calculators (Crop Nutrient, Fertilizer Application, Organic Amendment and Phosphorous Loss) with favourable response from the user community. OMAFRA Ministerial Announcement was released on September 4, 2019, entitled Helping Ontario Farmers Save Time and Money with Technology.

Outcomes:

- Mobile Access to all tools, supporting growing trend of using mobile devices for farm operations.
- Provide current users with a better user experience and more flexibility to conduct their business.
- Client profiles with individual user log-in and retention of profile information across all calculators.
- Decision-making tools to promote scientifically sound agronomic, environmental and land-use practices (with new Phosphorus Loss and Greenhouse Gas).

Natural Resources Information Portal (NRIP):

The ministry is moving forward with a plan to implement an online Natural Resources Information Portal to provide industry and the public with fast, accessible, easy-to-use, and secure online service. Initial efforts will focus on modernizing forest management planning services that support the province's forest products industry. This will be followed by the modernization of approval processes and reporting services for other natural resource activities including aggregates, Crown land use/activities and wildlife allocation. Implementation of the first beta release for forest management planning was completed in November 2019, the second release was completed in May 2020 and onboarding of internal and external users is in progress through to Fall 2020. Additional business lines will be modernized onto the Natural Resources Information Portal over the next 5-6 years.

Outcomes:

- Remove unnecessary effort and time burden on businesses and citizens.
- Improved usability, 24-7 online access to services and information on any device (mobile).
- Real-time collaboration between ministry staff and stakeholders.

- Automated services and processes, lower ministry cost and administrative burden.
- Future-ready with flexibility and adaptability to any industry or regulatory changes.

Permissions Enterprise Platform (PEP) (MECP)

The Ministry of the Environment, Conservation and Parks (MECP) safeguards our natural environment and healthy communities through environmental approvals and permissions. Approvals/permits are required for Ontario businesses that release air, water, land, or noise pollutants, or handle waste.

MECP has partnered with the Land and Resources I+IT Cluster to move from a paper-based Certificate of Approval program to an online digital service. This enterprise solution enables a risk-based framework that can support all ministry approval/permit business areas. Continuing to iteratively onboard new permission/approvals lines of business.

Outcomes:

- Business cost and time savings through online self-registration for low-risk approvals (months to minutes).
- Faster and easier online access to information, approvals, and permits (mobile access).
- Scalable, flexible, and reusable platform (enabling new lines of business to be onboarded in under 4 months), latest permissions onboarded
- Permit to Take Water (PTTW)
- Pesticide Licenses
- eECA 2.0 (Environmental Compliance Approval)
- Brownfields – RA (undergoing pilot)

In addition to air emissions, automotive refinishing, commercial printing, non-hazardous waste transportation, solar facilities, end-of-life vehicle disposal EASRs are already implemented.

Mining Lands Administration System (MLAS)

The Ministry of Energy, Northern Development and Mines (ENDM) regulates prospecting, mineral exploration, and mine development and rehabilitation. ENDM partnered with the Land and Resources I+IT Cluster (LRC) to implement a new online mining land-use management system supporting changes to the Ontario Mining Act and enabling electronic mining claim acquisition. MLAS launched on April 1, 2018. Since the launch, ongoing industry-requested improvements have been implemented.

To date there have been 13 releases & 4 Map Viewer releases that have addressed approximately 280 tickets. Major infrastructure upgrades have been made to ArcGis 10.6.1 since it was delivered in February 2020. As of June 2020, approximately 237,275 active mining claims are managed through MLAS and over 105,000 mining cells have been registered using the new MLAS system.

Outcomes:

- Mining Lands Administration System post launch fixes and enhancements to support industry users.
- E-staking 24/7 global access to mining/pro prospector services.
- Reduced time for mining claim acquisition (days to minutes).
- Public information on claims and activities available on a map (spatial data).
- Improved Indigenous community notification

Ontario GeoHub (MNR)

Land Information Ontario (LIO) is a part of the Ontario Ministry of Natural Resources and Forestry (MNR). It helps organizations and individuals find, access and share geographic data. LRC partnered with LIO on Ontario GeoHub, a new online geographic data discovery and access tool. It is the authoritative source for Ontario's geospatial data, including roads and transportation networks, wetlands, boundaries, and more.

It integrates fully with Open Data initiatives within the Ontario Digital Service, helping unlock high-value data to increase innovation and economic growth by optimizing government collaboration and citizen services. The government has developed capabilities in emerging geospatial and location technologies and practices to ensure innovative approaches to program delivery.

Outcomes:

- Simpler, faster and better ways for Ontarians to access and use government geographic data.
- Open and transparent public access to government data.

Water Operator Workforce Matching Tool

In Ontario, special drinking water and wastewater training, certification and licensing is required to ensure public safety. Ontario Regulation 75/20 allows for system owners to employ operators who held a license within the last 5 years, even if expired. During the COVID-19 Pandemic, there was the possibility that MECP regulated water and wastewater systems could experience staffing shortages. To support this essential service MECP needed an operator Workforce Matching Tool to match skilled individuals with employers.

Outcomes:

- Ensures continuity of services to ~1,100 regulated drinking water and waste water systems and 133 First Nations Communities in Ontario.

Forest Resource Inventory (MNRF)

The Forest Resource Inventory (FRI) is a key data and science support for forest industry and forest management planning. The Forest Sector Strategy contains a commitment to modernize the forest inventory via increasing use of remote sensing data (LIDAR, optical imagery, satellite data). This project will implement the data storage, processing and access tools to support development of the FRI and enable efficient sharing with industry. A beta release was completed in January 2020 using cloud-based infrastructure. Work continues to leverage the capabilities of the beta release and develop a business case for further implementation.

Outcomes:

- Deliver updates to the Forestry Resource Inventory for the Forestry Industry of Ontario in a more timely and efficient manner by moving to a continuous Forest Resource Inventory model.
- Improve the quantity and quality of the Forestry Resource Inventory by way of new automated analysis which will identify both the species and size of the trees more consistently.
- Support leading-edge science with modern user-driven technology.

	<ul style="list-style-type: none"> • Scalable centrally-managed high-volume data storage solutions for Ontario forest data. <p><u>Northern Ontario Economic Support</u> Northern Ontario Heritage Fund Corporation (NOHFC) is a crown corporation and economic development agency that supports the development of Northern Ontario Businesses. In the wake of COVID-19, NOHFC needed to provide relief to small businesses by pausing loan repayments and relied on printing and mailing paper cheques to distribute loans.</p> <p>Outcomes: I+IT supports NOHFC with the Financial Management System (FMS) LRC and ENDM partnered to ensure :</p> <ul style="list-style-type: none"> • Loan repayments could be managed and paused in the FMS • Cheques continued to be issued by ministry staff working remotely 	
<p><u>Labour & Transportation I&IT Cluster (LTC)</u></p>	<p><u>Ministry of Labour, Training and Skills Development (MLTSD) 360 Program (previously MOL 360)</u></p> <ul style="list-style-type: none"> • MLTSD 360 program delivers new digital and mobile capability that better meets the needs of clients within MLTSD Employment Standards (ES) program, replacing a legacy system with a modern and flexible cloud-based solution and dramatically enhancing the end user experience for 450,000 employers and 6 million employees across Ontario. • The project team leveraged Pivotal Labs' (a third-party software developer) agile approach in this transformational digital initiative, blending Business Product Owners and Technical Resources into one team, working side-by-side from design, development, testing to production. User interviews with public and internal users were also conducted to ensure the solution is being designed and developed with focus on user needs. • Progress Highlights: • In April 2020, the program implemented the complete Case Management functionality, replacing existing outdated system and introducing new and improved online services to employees and employers, with gradual rollout to 400+ Employment Standards users over the summer months. • The solution includes: 	<p>Wynnann Rose Chief Information Officer Labour & Transportation I&IT Cluster Wynnann.Rose@ontario.ca</p>

- Online Claim Form: a dynamic, guided form that helps employees submit a claim against their employers for noncompliance with employment standards (e.g. overtime pay)
- Claimant Portal: enabling claimants to check the status of their claim and upload related documents
- Employer Portal: allowing employers to check claim status and upload documents
- Comprehensive Case Management for Employment Standards users and officers to process claims and other administrative tasks
- Self Audit: allows employers to conduct Self-Audit activities to confirm compliance with Employment standards
- Self Check: enable public to see if they are eligible for a claim
- Since the rollout of the new digital claim services in June 2020, over 600 claims were submitted online.
- Development continues to enhance the system by providing features to further improve efficiency and usability.

Road User Safety Transformation Program

- Road User Safety Transformation is a multi-year strategy to transform the way the Ministry of Transportation (MTO) delivers services to the people of Ontario. It is one of the largest business transformation initiatives by the Ontario government.
- MTO has prioritized four (4) initiatives for the current phase (Phase 2) transformation to address long-stemming client service issues and to find efficiencies:
- **Driver Medical Review:** This initiative will transform the Driver Medical Review program so that health professionals and Ontarians who are fit to drive spend less time dealing with program services to restore driver licences. The team has made significant progress to date:
 - Cross ministry teams of business and IT participants worked in an agile way to transform and optimize driver medical policy and related reporting forms through agile sprints, for better experience by medical practitioners and drivers.
 - Working with a 3rd party vendor as a delivery partner, the team has followed a hybrid-agile delivery approach to build a new medical case management solution and is now getting ready for the first Minimal Viable Product (MVP) release in August 2020.

- Completed the automated data migration process and preparing to migrate 650M+ data records to the new solution.
 - Following the Ontario Digital Services' (ODS) user-centered design principle, conducted 15 driver interviews, engaged police officers across various jurisdictions, consulted with 21 health specialists, and collaborated with 60+ internal staff.
 - Finalized agreement with partner to implement new digital channel (Electronic Medical Record) for physicians.
- **Digital Document Management:** This initiative will implement a centralized digital document repository to fulfill client requests faster by providing real-time, self-service channel for MTO, law enforcement and courts, and retiring expensive microfilming of 22M+ documents a year. Progress to date:
 - Conducted policy transformation analysis to reduce and/or eliminate collection and storage of paper documents and working with business program areas to implement these changes.
 - Working in the new hybrid agile way, the project implemented a Minimum Viable Product (MVP) for the Driver Improvement Office (DIO) to eliminate an arduous manual document intake process, reducing the need for microfilming approx. 300,000 pages per year and replacing the legacy paper / fax process with a digital eFax solution (FaxOPS)
 - Completed business transformation for Suspension and Conviction notices and building a new digital solution to eliminate the legacy paper process.
 - Working with other OPS partners, completed the build of a new solution leveraging the corporate OPSDocs service, for digitization of documents collected over the counter by Service Ontario and DriveTest centres. Scanning automation includes bar-coded cover sheets for automated capturing of documents' metadata for consistent and efficient retrieval. The solution is targeted to go live in August 2020.
 - **Digital Information Management & Analytics:** This initiative will take advantage of the ministry's extensive information and data holdings to allow better decision-making and to build products for the public that will result in new streams of revenue for the province. Progress to date:



- Established a cloud-based data centralization platform and provided business users with a direct access to information through the Power BI tool.
 - Working with a 3rd party vendor as a delivery partner, the team adopted the new hybrid agile way of working, achieving high velocity within just 3 months of build sprints and successfully implementing the first release (minimum viable product) in July 2020 (features for MVP includes Data warehouse with 8 data entities; initial build of semantic data layer and business data dictionary; basic reporting and BI/analytics capabilities)
- True adoption of the agile approach was witnessed, when the team quickly adjusted the prioritized scope for the MVP release, based on true business value learned from user stories elaborated in early sprints.
- Developed Transportation Safety Division (TSD) data strategy, includes planning to establish Data Centre of Excellence to manage future use of data for TSD, including a formal data governance structure.
- Completed broad consultations to ensure alignment with broader OPS data initiatives (e.g. Ontario Data Strategy, Digital Data Insights, Data Hub)
- **Revenue Management:** This initiative will reduce process duplication by shutting down the ministry's revenue system and building on an existing corporate-wide financial system to manage MTO's non-tax revenue with enhanced analytics and forecasting capabilities:
 - While the project is being executed in a waterfall manner to align with implementation partner's delivery mode, some important agile concepts are being injected into delivery, such as early and recurring user engagement through frequent demos and showcases of screen designs and reporting functionality.
 - The project is set to implement several Audit recommendations and the team is working diligently on embedding these into the new design, as well as adjusting our various source systems, for better financial traceability.
 - Analysis, solution design and development activities for the core solution on the corporate financial platform are underway, along with

data preparation and migration activities, with the final release go-live targeted in March 2021.

- The program also onboarded an Organizational Change Management vendor to support the transformation initiatives. Due to COVID-19, many implementations and change management activities across all four initiatives successfully shifted to remote delivery.

Employment Services Transformation (EST)

- EST is a multi-year initiative (2019-2021, 2021-2023) to Modernize Employment Services Delivery in Ontario through the consolidation of fragmented employment services across Ministries (MCCSS and MLTSD) into a unified, locally responsive employment services that delivers better employment outcomes for individuals regardless of their needs.
- MLTSD would undertake a staged transformation of the integrated employment system through a commissioning approach open to non-profit, private, and/or municipal entities called System Service Managers (SSMs). The transformation will be codesigned and the digital product piloted with three SSMs, in three different geographic regions, from April 2020 until Winter 2021.
- Province-wide rollout of employment services transformation is planned by 2022-23.

Progress Highlights

- October 2019 - Agile Sprints started
- Three SSMs selected through procurement process
- April 2020 - Common Assessment Tool for client intake and assessment launched. This marks beginning of the pilot period with SSMs.
 - ~800 assessments completed; ~30 in progress
- April 2020 – Employment Ontario client registry launched. Single authoritative source of client's tombstone information
- July 2020 – First release of integration between case management systems of MCCSS and MLTSD launched allowing MCCSS caseworker access to Employment Ontario systems
- July 2020 – Employment Ontario Integration layer (API-based) enabled for system integration with external systems.
- July 2020 – Planning meetings held with SSMs for integration work.
- August 2020 - Agile sprints to integrate Ministry systems with SSMs' begin.

COVID-19 Response

Keeping Driver and Vehicle Apps on Route

- COVID-19 impacted the Ministry of Transportation's ability to deliver many services through the usual in-person channels, such as ServiceOntario, DriveTest centres and International Registration Plan offices. Technical solutions were needed to enact regulation changes, such as those extending driver, vehicle and carrier products.
- Emergency regulatory changes were put in place for extensions to driver's licences, licence plate stickers, Ontario Photo Cards, and Commercial Vehicle Operator Registration certificates.
- Automatic extensions were implemented on due dates for medical or vision reports to reduce the need for in-person visits to a doctor.
- **Extended Validity of Driver, Vehicle and Carrier Products**
 - Code enhancements allowed all drivers products set to expire to change to "extended" status and to allow for online renewal transactions for products beyond one year of their expiry.
- **Suspended Renewal Notices and Updated Messages**
 - Suspended the sending of renewal notices for driver, vehicle and insurance related products and updated various plates, notices and receipts with instructions to limit in-person visits. Previously, reminder notices were sent to vehicle owners in situations such as valid insurance requirements to complete a licence plate sticker renewal.
- **Extended Validity of Driver Instructor Licenses**
 - 548 Driver Instructor licenses were set to expire on March 31, 2020. A database change was implemented to ensure Driving Instructors remain licensed.
- **Beginner Driver Education (BDE) Program Changes**
 - The Beginner Driver Education application was updated for instructors and course-providers to accommodate new business rules.
 - Effective March 1, 2020, ministry-approved Beginner Driver Education (BDE) course providers were able to deliver the in-class portion of the BDE program online, allowing novice drivers the opportunity to

complete the in-class portion of the course from anywhere using the internet.

Commercial Vehicle Operator's Registration (CVOR) Online Renewals

- Approximately 6,000 seasonal carriers require Commercial Vehicle Operator's Registration (CVOR) renewals. Yet due to the COVID-19 pandemic, MTO staff were unable to process renewals in person.
- On April 5, the Ministry of Transportation implemented a new online renewal service available 24/7 for Commercial Vehicle Operator's Registration (CVOR).
- This service was launched during a maintenance release of the Registration Licencing System of Ontario (RLSO) which also included enhancements to Facility Audit functionality and 28 defect fixes.
- **Key Outcomes**
 - Since launch, 17,400 transactions were fulfilled.
 - Time to renew online CVOR certificate is 5 minutes end to end -- down from an average of 15 business days through the manual process.

Ontario 511 Mobile App for Truck Drivers

- In response to the COVID19 Pandemic, the Ministry of Transportation (MTO) is currently providing 44 Rest Areas and 32 Truck Inspections stations to accommodate commercial vehicle parking needs. This includes the 23 ON Route Service Centres on Highways 400 and 401. In addition, MTO has accelerated the opening of 15 Seasonal Rest Areas across the province with 12 of these sites being able to accommodate truck parking on site and two other sites where trucks can pull off the highway for a short duration to use the washroom facilities. Six other sites are open year-round.
- In response to COVID-19, quick action was required to address industry concerns about ensuring truck drivers had the resources they needed to continue providing critical transportation services and maintaining the supply of critical goods, such as food and medical supplies, across the province.
- Information posted to Ontario511 included:
 - Rest stops
 - Washrooms and/or showers

- ON Route locations
- Truck Inspection Stations
- GO Station Parking that can accommodate trucks
- The 511 app provides truck drivers with simplified access to critical information as they move essential goods and supplies across Ontario (e.g., safe rest areas, truck parking, construction, road closures, food services, fuel and more).
- Besides updating Ontario511 (web app), additional work streams were developed:
 - Ontario 511 App: Build a mobile app as an answer to a need as nearly 55% of visitors are using a mobile device. Initial focus is on providing information to support carriers travelling through Ontario.
 - COVID-19 Updates on Ontario.ca: Update the existing page on Ontario.ca to include a new section that has links to Ontario 511 interactive map, a text report and a text report of supporting private partners.
- **Key Outcomes** – As of July 15 the 511 app had earned:
 - 9,630 downloads
 - 204 average active daily users
 - App Store rating of 4.3/5

MTO Services Dashboard

- The Transportation Recovery Dashboard was created to monitor the recovery of the transportation sector, MTO Services, and mobility across the province during the ongoing COVID-19 pandemic. The dashboard is being rolled out in several phases, with connections to the ministry's overall recovery planning efforts and longer-term monitoring of transportation indicators.
- The dashboard is meant to help executives in the decision-making process by providing up-to-date data from across the province centered around the six areas of focus of MTO's recovery framework: transit; goods movement and supply chain; transportation demand management; operational needs of passenger services; customer service delivery; and infrastructure project delivery and fiscal stimulus.
- Using 12 indicators drawn across MTO and outside sources

	<ul style="list-style-type: none"> - Transit – Metrolinx Transit Revenue, Metro Transit Ridership, GO Transit Boardings, ONTC Bus Ridership, Toronto area transit usage - Goods Movement and Supply chain – Commercial Traffic by Industry, New Motor Vehicle Sales - Transportation Demand Management – Commercial Truck Border Crossing Duration, Waze congestion data - Customer Service Delivery – Driver's Licence Renewals, Driver Licence Services, Plate Sticker Renewals, Ontario Photo Card, Carrier Registration Office, Highway Corridor Permits, Road Test, Knowledge Test, Out of province Licence Exchange <p>Operational Needs of Passenger Services – Aircraft Movement at Select Airports, Ferry Passenger / Car / Truck Volumes, Mobility to Place of Interest, Truck Traffic to Select Airports</p>	
<u>Ontario Digital Services (ODS)</u>	<p>Identity Management – Digital Identity</p> <p><u>Accomplishments:</u></p> <ul style="list-style-type: none"> • Completed proof-of-concept exploring an API-based secure connection of a third-party network provider to Ontario's DI Gateway to demonstrate identity validation using driver's licence data. <p><u>In Progress:</u></p> <ul style="list-style-type: none"> • Development of the Digital Identity Gateway Minimal Viable Product in partnership with Ministry of Health, Ministry of Transportation and Ministry of Government and Consumer Services to support remote identity data validation using government issued documents (Driver License, Ontario Photo Card and Health Card) in support of the Patient IAA Project. • Alignment on technology roadmap and investment plan, identifying opportunities for DI across government • Development of a policy framework and business case for Digital Identity Program in partnership with key ministries and stakeholders • Proofs of Concepts (POCs) and Pilot initiatives: Ontario will continue to engage Ministry partners across the OPS to collaborate on potential POC and Pilot project opportunities; currently exploring: <ul style="list-style-type: none"> - Remote identity proofing for Social Assistance applicants needing support post CERB. Targeted to launch Fall 2020. 	<p>Robert Devries Assistant Deputy Minister, Platforms Cabinet Office Robert.Devries@ontario.ca</p>

- **Pan-Canadian Trust Framework:** Ontario will continue to work closely with Federal-Provincial/Territorial (F-P/T) Tables to advance the Identity Management priority and development of the Pan Canadian Trust Framework (PCTF) which will inform Ontario's policy approach to enable a digital identity program in the province.

2. **Priorities:**

Briefly describe what your organization sees as its **top IT/IM priorities/initiatives over the next 12 to 36 months.**

The PSCIOC is particularly interested in jurisdictional information in the following areas:

- **Digital Government**
- **Cyber Security**
- **Talent Management**

Central Agencies I&IT Cluster (CAC)

Architecture, Information Management & PMO Branch

Expansion of data dashboard to business partners using PowerBI

As part of Power BI reporting service, the CAC Project Management Office (PMO) is expanding data dashboard to business partners. The data dashboard will provide a central location for business partners to monitor and analyze performances or specific processes. Dashboards present interactive data visualizations that enable business partners improve the ministry services based on data insights.

Ontario Resource and Budget Information Tracking (ORBIT) Reporting and Analytics Modernization

The ORBIT Reporting and Analytics Modernization project will deliver a modern, nimble reporting data warehouse capable of fulfilling current and future reporting needs. The data warehouse will be configured and establish an interface with the IFIS Business Intelligence Analytics (BIA) platform to leverage and expand on the existing OPS investments in Business Intelligent (BI) and Analytics tools. It will provide a stable and secure platform for all ORBIT reporting, serve as a consistent, singular financial reporting solution across the OPS, and is an easy-to-use platform that supports ad-hoc reporting and visualization.

Managed Service Provider RPA

CAC will implement a new Managed Service Provider (MSP) model to procure temporary IT contractor services to streamline processes, lower costs for vendors and government and expand opportunities for vendors. MSP will transform and automate several manual processes to create efficiency and streamlined financial

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processing capabilities within the cluster. It delivers more efficient and integrated processes, providing higher organizational productivity and streamlining current financial processes. The model explores and assesses how Cognitive/RPA technology can be leveraged to transform and automate financial processes such as purchase requisitions and invoicing to better serve the needs of the business.

Enterprise Applications Branch

eArchives

eArchives is an archiving service that provides OPS business areas with a data search and retrieval function, with capabilities to transition historical data. The eArchives service will provide a custom read-only view of the business area's historical data that will mimic the decommissioned applications look and feel. Currently, CAC has launched a project with a goal of turning this product into an enterprise service offering. The service provides clients with a system to reference historical data, minimizes duplication of data that might otherwise be kept on client hard drives and ensures data assets are managed and protected appropriately (backups, security etc.).

Digital Signatures

CAC will implement an eSignature solution that can be leveraged across the enterprise, allowing new forms of approval for documents that previously required ink signatures. This tool will enable ministries to efficiently approve documents electronically and remotely and will enable adoption of the new Delegation of Financial Management Authority (DOFMA) policy.

OPS Binder Browser 2.0

The Enterprise Applications Branch will implement upgrades to CAC's Binder Browser application by enabling remote, offline and online access to information and meeting materials by providing a portable, easy-to-use digital alternative. The upgrades reduce paper printing costs, promote an environmentally friendly workplace, increase efficiency and productivity, and enable business partners to efficiently run committees while working remotely.

Cluster Applications Branch

COVID-19 Pandemic Mitigation – ReOpening of the Province

As the Government of Ontario executes a controlled reopen of the Province, Cluster Applications Branch (CAB) is working closely with the Ministry of Finance (MOF) to ensure a smooth technology return of the COVID-19 relief measures back to regular business. This includes a managed resumption of GAINS financial supports for seniors, tax penalties and interest, collection charges and activities, and audit and inspections activities.

Revenue Processing, Image Capture and Data Entry Transformation Initiative (RIDE-TI)

The RIDE-TI multi year project will re-engineer and modernize how the Ministry of Finance (MOF) delivers its payment processing, imaging and data capture processes. Benefits of this initiative include better serving the public through an online portal, aligning with the government's digitization strategy and MOF's e-services vision, enhanced security, administrative efficiencies, operational savings, and a reduction in the total amount of paper processed.

Implementation of RIDE-TI will be accomplished using a phased approach where the current solution will be gradually transitioned to the new IT solution by July 2024. It will generate long-term savings to the MOF through the re-engineering of business processes, reduction of paper, and streamlining of operations. A significant milestone is the release of a substantial RFB, posted to the vendor community on June 29, 2020. This RFB addresses procurement of a modernized, configurable Back-Office solution that will leverage technology to transform the MOF payment and image capture processes.

Centralized Collections

The Ministry of Finance (MOF) is the debt collector for the Ontario Public Service (OPS) and other public entities (agencies, boards and commissions). Currently collections of tax and non-tax debt are handled by individual collectors working on various computer systems using different rules, training and procedures. These systems range from complex case management systems to spreadsheets.

Centralizing collections within the MOF is a key multi-year transformation initiative that focuses on a consolidated, consistent and integrated approach to recovering accounts receivables (AR) across the OPS. The vision is to provide a single source of collection services and tools, using common processes and practices for all ministries and programs regardless of debt type.

The current MOF robust tax collection IT system (OntTax), provides enhanced collection tools (i.e. liens, warrants, and garnishments) to collect on outstanding debt. MOF and CAC will enhance this system to include partner ministry accounts and facilitate expanded use of the enhanced collection tools for these partner ministry programs. This solution will support efficiency, and lead to a more consistent client experience.

eSignature Solution Project

The primary objective of this project is to provide an electronic alternative to the current paper-based consent process for Benefits Programs administered by the Ministry of Finance (MOF) that have Automated Income Verification processes to determine program eligibility and entitlement for low income Ontarians. Integrating an e-signature solution in the application processes creates a fully digital process, reducing the burden on the client of separately submitting a paper consent via mail. This project aligns with the Digital Government initiatives and is supported by user research conduct on the overall benefits program administration. It will be integrated with an existing program application process providing a full online submission process.

Identity and Access Management Branch

Enterprise IAM Modernization Program

The IAM Modernization Program focuses on delivering three secure identity and access management solutions: Public Secure, BPS Secure and OPS Secure. To achieve this, the program will focus on technology platform stabilization & rationalization, services re-branding and service enhancements to incorporate business partner requirements. The program will enable the government to quickly and seamlessly protect new business applications (digital public services) and provide support for Business Applications with high sensitivity requirements—which protects personal and sensitive information as required by legislation and policy.

Business Services & Management Branch

Digital Technologies

Introducing Digital Technologies to improve efficiency and streamline business processes using Robotic Process Automation.

IT Source

Planview Enterprise One Version 17 Upgrade

Planview Project Portfolio Management (PPM) solution is an enterprise offering that is currently used by all Clusters and various business areas. Planview PPM enables the OPS to make strategic decisions, prioritize and plan projects, efficiently manage resources, report on project status and produce executive level dashboards. Planview Inc. has released Planview Enterprise One (Version 17), which includes extensive functionality enhancements that benefit administrators, end users and service owners. The OPS has been using Planview Version 13 since 2017 and with the upgrade to Version 17, opportunities to fully leverage the latest product features will become available. To support the transition to Version 17, a Planview Test Environment Upgrade to Enterprise One Version 17 was initiated in February 2019. This test upgrade enabled the Planview Project Team to perform an impact assessment to determine and inform the production upgrade path for like-for-like functionality, training, change management and implementation strategy with limited vendor involvement. Over the past 9 months, the Planview Project Team has been working closely with Planview Inc. on regression testing, testing new enhancements, vendor patches and validation of internal Project Management processes. Another key component of the upgrade is the planning, provisioning and delivery of compliant end-user delta training to all Clusters and clients to ensure compliance with The Accessibility for Ontarians with Disabilities Act (AODA) and change management and communications in support of the upgrade. This Planview upgrade also aligns with the strategic priority to increase project management adoption, maturity and decision-making capability using a single Enterprise Portfolio Project Management solution, Planview PPM.

Organizational Change Management Initiative

The Organizational Change Management program is actively testing the tools and methodologies previously developed on internal initiatives e.g. Planview Version 17 Upgrade and the Vendor of Record Replacement Project, of varying scope and complexity. This internal testing helps us to Lean our approach and ensure that it is practical and nimble to scale the application against different types of change initiatives. We have also been looking at innovative ways to apply OCM in an almost completely remote environment using video conferencing, virtual whiteboards, collaboration spaces and online user testing sessions, to name a few. In addition to the practical consultations noted above, the team is in the final stages of developing

	<p>a Leadership Learn Path for rollout in Q2/Q3. This updates the branch's Competency Model to include a more accurate description of Organizational Change Management and the proficiency levels based on matrixed OCM roles. The focus will be on Leadership Competency at the start as we work to engage our leaders as active and visible sponsors in change.</p> <p><u>Client Account Management</u></p> <p>The Client Account Management (CAM) program was initiated to develop a framework to define and advance the client account management function for the People Placement Service. The People Placement Service, in the Central Agencies I&IT Cluster (CAC), manages the enterprise I&IT contingent workforce that provides on-demand internal (OPS internal I&IT Professional Services Staff) and external (through the I&IT Task-Based IT Services Vendor of Record) I&IT consultant professionals to ministries to meet their temporary I&IT staffing needs. CAM functions include Client Relationship Management, Reporting Modernization, Client Communications, Service Performance and Resource Fulfillment Strategies. CAM Account Leads began the process of regularly engaging with Cluster Host Managers to discuss tactical and operational resourcing needs in the immediate to near term. These ongoing discussions have resulted in increased predictability of upcoming demand, enhancing the teams' ability to match skilled resources to priority demands, a better understanding of client needs resulting in proactively managing utilization rates intentions related to new assignments, renewals, and changing priorities. As a result, the People Placement Service has been able to maintain a consistently high placement rate of internal OPS employees and has gained valuable insight into Clusters' future workforce needs. Through high placement rates and the expansion of Professional Services Staff role categories to meet the increased demand for digitally-focussed roles, CAC continues to support Ontario's position of reducing dependency on Fee-for-Service (FFS) Consultants.</p>	
<p><u>Cyber Security Division (CSD)</u></p>	<p><u>The cyber security top priority for Ontario includes implementing the Ontario Public Service Cyber Security Strategy, focusing on:</u></p> <ul style="list-style-type: none"> • Heightened Organizational Awareness • Enhanced Monitoring and Threat Intelligence • Proactive Management of Cyber Risks • Modern Identity and Access Management Services • Cyber Security Centre of Excellence for the Broader Public Sector 	<p>John Roberts, Chief Privacy Officer, Archivist of Ontario and Chief Information Security Officer, Information, Privacy and Archives Division and Cyber Security Division john.roberts@ontario.ca</p>

	<p><u>Cyber Security Awareness Month 2020</u></p> <p>October is Cyber Security Awareness Month, an internationally recognized campaign that is held each year. 2020 marks the 9th year in the OPS. Since COVID-19, we have seen a sizable shift in working remotely and the potential for lasting change in work arrangements. In this new normal, without the protections that we would have in our offices, Cyber Security Awareness Month provides an opportunity to learn about the emerging cyber security environment and best practices, meeting the government's commitment to enhance current cyber practices and safeguard the public's information).</p> <ul style="list-style-type: none"> • Partnerships include the Canadian Centre for Cyber Security, Communications Security Establishment, Ontario Provincial Police, City of Toronto and the University of Toronto to ensure collaboration across sectors. • Each week of the month, the CSD releases new educational materials – including videos, infographics, articles - and offered webinars that will be available to all OPS staff A toolkit package called “CSAM in a Box” is shared with some BPS partners, municipalities and jurisdictions across Canada each year. This year, with the establishment of the COE, the toolkit will be a key way to expand the strengthen the BPS partnership for organizations hosting this campaign. 	
<p><u>Children, Youth and Social Services Information and Information Technology Cluster (CYSSC)</u></p>	<p><u>Child Protection Information Network (CPIN) Deployment and Enhancements</u></p> <ul style="list-style-type: none"> • CPIN technical upgrade is on target to go to production in October 2020 with latest Curam version (version 7.0.9). • Upgrade all non-CPIN child welfare related systems like mFTIS (modernized FastTrack Information System) and CARs (Child Abuse Registry system) to the latest software versions. • Enhance and upgrade CPIN to be more culturally appropriate by adjusting language, user experiences, implementation of all different variations of regulations, laws and policies that impact the child welfare ecosystem. <p><u>Ontario Autism Child Information System (OACIS)</u></p> <ul style="list-style-type: none"> • Determine longer term technology solutions that align to new Panel recommendation for Ontario Autism Program (OAP) program design whilst continuing to provide service continuity for OAP through OACIS as an interim technology solution. 	<p>Aklilu Tefera Chief Information Officer and Assistant Deputy Minister, Children, Youth, and Social Services I&IT Cluster Aklilu.Tefera@ontario.ca</p>

	<p><u>Common Cluster Platform Modernization:</u></p> <ul style="list-style-type: none"> • Modernize common platforms to enable digital functionality and reduce hosting/maintenance costs. <p><u>Social Assistance Modernization:</u></p> <ul style="list-style-type: none"> • Automate solution development, testing and deployment and reskilling staff resourced in digital activities. • Deliver more government services through digital means to improve services and reduce administrative burden for staff. <p><u>CYSSC Digital Tools and Processes</u></p> <ul style="list-style-type: none"> • Mature agile process adoption to enable rapid solution delivery • Improve automation for regression testing 	
<p><u>Community Services I+IT Cluster (CSC)</u></p>	<p><u>Online Learning: Transition to TVO/TFO</u></p> <p>To give secondary students more choice in high-quality online learning courses - no matter where they live or go to school - the Ontario government is proposing amendments to the Ontario Educational Communications Authority Act and Ontario French-language Communications Authority Act that would broaden the mandates of both TVO and TFO to position them to provide centralized administration, coordination and support for teacher-led online learning in the English-language and French-language publicly-funded education systems.</p> <p>The Ministry of Education will be establishing an IT working table that includes TVO, TFO and the Community Services I&IT Cluster (CSC) to discuss what the solution might look like, including efforts around an online learning catalogue that provides all the details of course offering for students across the province. This work will provide greater access to educational opportunities for all students in Ontario, by modernizing educational delivery through enhanced use of online learning. Students will graduate with the appropriate awareness, skills and comfort level that will allow them to harness technology to their benefit throughout their lives. Online learning will increase access to 'anytime, anywhere' programming and educational opportunities for students, no matter where they live in Ontario.</p>	<p>Soussan Tabari, Chief Information Officer, CSC (416) 326-8216 Soussan.Tabari@Ontario.ca</p>

GIS maps to enable decision-making for education, during the COVID-19 pandemic

On July 30, 2020, the Ontario government unveiled their plan and guidelines that would allow students across the province to safely return to class in September 2020. The Ministry of Education and Community Service I&IT Cluster (CSC) will work in partnership to develop a plan for the safe re-opening of schools for the new year using spatial and statistical analysis and models.

GIS maps and a GIS web application will be used to monitor the daily COVID-19 hotspots and confirmed positive cases as it impacts Ontario's schools, student postal code locations and catchment areas.

The Ontario Assessment Centre's dataset will be included in the spatial visualization and distance analysis to ensure testing centres are available to students and staff in Ontario.

The GIS maps and analysis results will enable decision makers to implement a safe re-opening of schools in September.

Modernizing Education Capital Management

Education Capital Information System (ECIS) is a business process re-engineering initiative intended to modernize and replace the existing legacy **School Facilities Inventory System (SFIS)** with a new integrated and automated Commercial-Off-The-Shelf (COTS) Integrated Workplace Management Solution (IWMS). The new solution will improve efficiency and effectiveness in the administration of Education and Child Care capital and operating funding, while automating the overall business processes, and meeting Ontario Public Service (OPS) application and security standards and other government mandated compliances.

Ontario's publicly funded school infrastructure consists of an asset base of \$56 billion and approximately 5,000 schools that serve close to 2 million students annually or close to 15% of Ontario citizens. To support this infrastructure, the Ministry of Education (EDU) and school boards utilize SFIS to manage and maintain this asset inventory.

	<p>The information in SFIS is relied upon to allocate over \$4 billion in School Foundation Grant and School Operations and Renewal Grants annually and to conduct policy change analysis and decisions (e.g. Capital Priorities funding decisions, Pupil Accommodation Review Guidelines, etc.).</p> <p>The new solution would provide the business, school boards, and other ministries and stakeholders with a number of important benefits. Some of the benefits include:</p> <ul style="list-style-type: none"> • Increasing availability, transparency and sharing of information between relevant parties and systems (e.g. visibility of data between school boards, which does not exist today) • Providing streamlined and automated capital processes for higher efficiency, adaptability, transferability (i.e. between ministries and programs), and equity • Achieving a high level of accountability through system automation, auditable process flows, and detailed data extraction and reporting capabilities to meet internal information needs, stakeholder needs, other ministry needs, media requests, MO and PO reporting/information needs and public information requests • Offering timeliness, adaptability, transferability and scalability to meet evolving requirements <p>The Ministry of Education has also been collaborating with other organizations including the Ministry of Infrastructure / Infrastructure Ontario to strategize on standardizing and centralizing asset management data.</p>	
<p><u>Government Services Integration Cluster (GSIC)</u></p>	<p><u>Contact Centre Modernization Initiative (CCMI)</u> Continue to deliver on the activities of the Contact Centre Modernization initiative (a multi-year plan to reduce and/or eliminate duplicative and inconsistent processes and technology) enabling the implementation of the next generation contact centre business model enabling the Ontario Government's commitment of Building A Smarter Government and offer best in class phone, email, online chat and two-way messaging options and services to help Ontarians get information faster and with more ease.</p> <p><u>Paper Notice Elimination and other Top10 projects</u> In partnership with Ontario Digital Service (ODS), ServiceOntario, Labour and Transportation Cluster (LTC)/ Ministry of Transportation (MTO), Health Services Cluster (HSC)/Ministry of Health (MOH) deliver the contact centre technical solutions</p>	<p>Renee Laforet, Chief Information Officer, Government Services Integration Cluster renee.laforet@ontario.ca</p>

and provide the technical expertise and support to enable the elimination of paper notices for specific ServiceOntario/MTO/MOH programs making it simpler and easier to receive information from government.

Shared Utility Service NextGen

Shared Utility Service NextGen (SUS NextGen) went live on June 15, 2020 with the launch of the API based ServiceOntario Service Location Finder enhancement with accelerated timelines to support Ontario's COVID-19 response. SUS NextGen had been a roadmap and a result of evaluation, design, implementation, and validation work over the past 2-3 years. With the official launch of the new ServiceOntario Location Finder (SLF) in partnership with Ontario Digital Service, this microservice cloud application became the first ever to be hosted on the SUS NextGen environment. Multiple SUS NextGen capabilities were leveraged as part of this initiative, including:

- Integration with Amazon Web Services (AWS), where Ontario.ca is hosted
- Containerized SLF application
- Seamless integration with Public Cloud & On Prem services
- End-to-end API Management using IBM API Connect to integrate with existing legacy SLF application hosted on traditional SUS

GSIC is collaborating with ODS and other I&IT clusters to implement capabilities required for modernizing legacy applications and for building new Digital initiatives to offer simpler, faster, better services using the SUS NextGen Platform.

Some of the applications that will be going live on SUS NextGen platform include:

- ODS Digital Identity - This will also be using API gateway capability & integration with Ministry of Health by Q2, 2020-21
- CYSSC DSCIS application modernization initiative - Application to go live Q3, 2020-21
- CCMB 2 Way Messaging - POC, aiming to finish by Q2, 2020-21
- JTS CJDD - POC, currently in progress
- HSC WebFocus upgrade - aiming to go live Q1 2021-22

Multiple other phases of this project are in progress:

- Phase 1 is to build new container-based application server environment & targeted to be completed by Aug 31, 2020.

	<ul style="list-style-type: none"> • Phase 2 will include building new WebServer & Database environment • Phase 3 will include application migration to new environment & schedule to start in Q3 2020-21 <p><u>Robotic Process Automation and Machine Learning for Accounts Payable</u> Enterprise Financial Services Division (EFSD) in partnership with Government Services Integration Cluster (GSIC) launched a project to automate invoice distribution, processing, and verification and to modernize the submission process by providing a digital portal to replace the current paper-based submission method in collaboration with Infrastructure Technology Services, GSIC and the Office of the Provincial Controller. This project has two phases; first to pilot with one ministry followed by a planned OPS-wide rollout to follow.</p> <p>The first phase went live in December 2019, improving the client ministry experience and processing invoices simpler, faster, and better, by:</p> <ul style="list-style-type: none"> • Reducing the total end-to-end processing time for AP invoices submission from 20-40 days to 5-8 minutes per invoices • Maximizing digital-first inputs and minimizing the use of paper • Increasing accuracy of payment requests and increasing the percentage of invoices paid on time • Improving compliance and controls through the upfront validation process <p>The second phase is planned to roll-out the solution to all ministries from Q2 to Q4.</p>	
<p><u>Health Services I&IT Cluster (HSC)</u></p>	<p><u>Assistive Devices Program (ADP) – eSubmission</u> This project will allow for secure digital submission of Assistive Devices Program (ADP) vendor invoices and device claims applications to the Ministry of Health, leveraging existing delivery channels currently used by medical claims submitters and for ADP vendor reporting. Electronic invoicing was implemented in February 2020, with electronic claims application submissions scheduled to follow with phased implementations of forms based on business priority beginning at the end of 2020.</p> <p><u>Adoption of Cloud Ready Platform SAS Viya on GoCloud Platforms</u> Health Services Cluster (HSC) successfully implemented SAS Visual Analytics solution for the ministry serving both internal program area users (about 300) and external users (about 250) – mostly from LHINs. Ministry had published a number of subject oriented, self-contained visualization analytic tools covering subjects such as Home Care Activity tool, Home Care and ALC hospital discharges, Hospital</p>	<p>Karen McKibbin Chief Information Officer Health Services I+IT Cluster Karen.McKibbin@ontario.ca</p>

Utilization (Daily Bed Census), Patient Safety, Opioid Overdoses, Dementia Capacity Assessment tool, Population Explorer and Health Care Connect among others. These tools allow users to explore the health data both visually and geographically to understand trends and patterns of activity. SAS VA tools help with both program funding, service planning and policy development perspectives.

Given the increasing demand for easy-to-use health analytical tools with visualization capabilities, ministry is in the process of adopting SAS Viya, a next generation cloud-ready platform that provides more capabilities as well as scalability needed to address growth in ministry needs especially for external stakeholder access.

OHIP Eligibility Data Integrity

The Ministry of Health is working to ensure the integrity of the OHIP client registration database. The database currently holds registrations that require action due to questions of continued entitlement to OHIP coverage. IT work has progressed to effect data integrity for obsolete registrations where a health card has been reported as lost, stolen, damaged, cancelled or voided. Further work will be implemented to end OHIP eligibility for Red & White as well as expired Health Cards, which will ensure only eligible individuals will be able to continue to access publicly funded and insured health services.

Arbitration Award between the Ontario Medical Association and the Ministry of Health

I&IT development and support continues to meet the arbitrated savings requirements and targets of the Physician Services Agreement. This agreement was awarded through binding arbitration in February 2019, following five years without an agreement between the Ministry and the Ontario Medical Association. This Physician Services Agreement is in effect April 1, 2017 to March 30, 2021 and includes multiple elements over the four-year period

Health Card Production and Procurement Project

MOH and MTO are co-owners of the card production contract, which will expire in 2022. An approach is being taken to both ensure the maintenance of business continuity, security, and provide the flexibility for future enhancements to support the



government's vision for digital service delivery. The approach will allow for new features/functions to be added to the existing solution and enable innovation solutions such as piloting and/or introducing new card products (e.g. mobile cards, digital credentials, e-wallets, biometrics).

Enhancing the Case and Contact Management (CCM) Solution: HSC will continue to enhance the provincial Case and Contact Management solution with more functionality, additional integration with the provincial Ontario Laboratory Information System (OLIS), Contact+ and the provincial Provider Client Registry and any outstanding COVID-19 data migration from the legacy provincial communicable disease database (iPHIS). CCM may also be extended to support PHU management of flu cases and outbreaks, and other reportable diseases of public health significance (DOPHS).

Technology and data supports for COVID-19 vaccine, including enhancing the Provincial Digital Health Immunization Repository (DHIR) with COVID-19 immunizations:

Ahead of COVID-19 vaccine(s) availability, planning is underway to support the province with data, technology and enabling policy considerations in its scenario planning in the following areas: (i) prioritization, eligibility and immunization schedule (ii) vaccine administration from a wide range of providers inclusive of pharmacies, primary health care providers, long term care/congregate settings, public health units, mass immunization clinics, etc. (iii) reporting of adverse events following immunization (iv) vaccine ordering, distribution and inventory management (v) analysis inclusive of population immunization coverage and surveillance and vaccine effectiveness (vi) integration between DHIR and CCM.

Of note: while DHIR has been developed to contain all immunizations for all Ontarians, most records currently held are those that are mandated to be reported to public health (i.e., immunizations related to the nine designated diseases under the *Immunization of School Pupils Act*) and any other immunizations an individual may decide to share with their PHU. Enabling policies such as mandatory reporting for COVID-19 immunizations from all providers in response to the pandemic would support responsive public health measures.

Electronic Medical Records (EMR) Integration: The ministry is continuing to progress on its partnership with OntarioMD (OMD) and Ontario Health Digital Services to integrate Electronic Medical Records (EMRs) with the provincial Digital

Health Drug Repository (DHDR) and Digital Health Immunization Repository (DHIR). Through this work, community-based clinicians using OMD-certified EMRs will be able to: view and submit immunization records and access clinical decision support from the immunization forecaster from the DHIR, as well as view dispensed drug and pharmacy services records from the provincial DHDR.

EMR integration will improve patient-centred care by providing authorized health care providers with secure electronic access to patients' immunization and dispensed drug information. EMR integration with the DHIR will improve patient outcomes, decreased the risk of adverse events, decrease immunization reporting burden on parents and streamline frontline providers' workflow.

Four OMD-certified EMR vendors: (Well Health (acquired OSCAR EMR), Indivica, QHR and YMS are actively engaged in development and integration testing. Pending further discussions on PHU capacity, expected rollout to clinicians is scheduled in late 2020 with a target of ~800 community-based physicians and nurse practitioners. Additional OMD-certified EMR vendor engagement and onboarding of clinicians is expected to occur in 2021.

CANImmunize / DHIR integration and Provincial Identity Proofing: As part of the ministry-wide Identity Authorization and Access (IAA) project, HSC will support the integration of the CANImmunize app with the provincial Digital Health Immunization Repository (DHIR) as one of the use cases in Phase 2 of the project in the Fall/Winter, as capacity allows. The IAA project will allow an individual to use a digital application to verify certain pieces of identification, such as the Ontario Health Card, and to subsequently use that verified identity to request access to their Personal Health Information. The use case that HSC is looking to support would allow an individual to log into CANImmunize app using the provincial identity verification service for them to manage their immunization records.

Extension of the Special Authorization Digital Information Exchange (SADIE)

The SADIE solution, through its use of criteria-driven, dynamic forms, allows authorized prescribers to submit applications to Ontario's Exceptional Access Program (EAP) for patients who are Ontario Drug Benefit (ODB) program recipients. EAP facilitates access to drugs not funded on the ODB Formulary, or where no listed alternative is available. SADIE—which has been available to Ontario physicians and nurse practitioners since July 2019—provides a familiar and intuitive online channel

that reduces incomplete EAP requests and collects clinical data to inform program performance and decision-making. In June 2020, SADIE was expanded to allow the assignment of designates who can prepare EAP requests for review and subsequent submission by the practitioner. SADIE is data-driven by rules through a decision manager that was created to enable guided data-entry for many EAP drug and indication combinations. Rules are written and maintained by the business program area, allowing them to adapt quickly to changes such as funding criteria updates and new drugs being added to EAP. SADIE also has “Google-like” elastic search features that provide a better end-user experience, quickly connecting them to the information that they are seeking. Approval is currently being sought to extend SADIE in future releases by introducing full staff delegation capabilities (i.e., authorized delegates will be able to submit the request on behalf of the prescriber), developing near real-time automated assessment functionality, working with other divisions and/or ministries to allow the use of SADIE platform components by other program areas, and collaborating with stakeholders on the design of technical specifications for eventual Electronic Medical Record software integration.

Provider Services Modernization Strategy

The ministry is progressing the Provider Services Modernization Strategy (PSMS) which is defining the framework for modernization of an eligible suite of OHIP related provider services that are paper based, manual and/or need to be redeveloped to ensure continued service delivery which will be applied to a suite of priority services. Business needs have been organized into processes and business functions have been identified as either common or unique. This work will enable the creation of repeatable and reusable functions and services to support efficient digital service delivery. The Out of Country Claims Prior Approval service is one such service to which the strategy will be applied.

Forms Modernization

The ministry is advancing work to modernize forms that need to be completed and submitted to the ministry by health providers and Ontarians. This work is intended to both standardize and enable digital forms submission eliminating inefficient paper processes. The ministry is engaging with other ministry partners, OntarioMD and Ontario Health to advance planning to implement a seamless end user experience for forms submission which will also enable ministry back office processing efficiencies.

Registration Modernization

The current health provider registration process with the ministry is cumbersome and heavily paper-based. The ministry will be collaborating with both internal and external partners to support redesigning the submission and enhancing the end user experience which will also create back office efficiencies and improved service delivery to the health provider community.

Expanding Online Health Card Renewal

The ministry is collaborating with the Ministry of Government and Consumer Services, Ministry of Transportation and Ontario Digital Services to accelerate digital initiatives and increase online uptake of health card renewal services, including a focus on vulnerable populations (children and seniors), by both expanding access to the service and promoting the online delivery option for audiences who are eligible to complete transactions online.

Computer-Aided Dispatch (CAD): MOH is responsible for the delivery of land ambulance communication services across its 22 Ambulance Communication Centres across the province. The Computer-Aided Dispatch system (CAD) is a mission critical application used by the 22 dispatch centers to support an automated process to capture incoming 911, and other calls for service. Beginning in October 2020 through 2021 the CADs will undergo a significant hardware and software upgrade. These upgrades are intended to enhance methods for assessing and recommending closest response ambulances and provide better visibility for Ambulance Communication Officers of resources belonging to neighbouring ACCs.

Medical Priority Dispatch System (Triage Algorithm): A medical algorithm is an 'intelligent' decision tree for every medical eventuality used by personnel who receive calls for medical assistance. The medical algorithm provides a structured, standardized approach to quickly determine ambulance response based upon the information provided by a 911 caller. An ambulance responds either with 'lights and sirens' or without, based on the severity/perceived severity of the patient's condition. An effective medical dispatch system includes medically approved systematic caller questions, pre-arrival first aid, CPR and other preparation instructions, along with standard protocols to optimize the match between a patient's medical needs and appropriate pre-hospital resources. Through 2020 to mid-2021, the project will establish the Ambulance Communication (call take/dispatch) workflows to replace the current dispatch triage tool and enhance emergency medical services to Ontarians and look to begin live deployments late 2021.

Public Safety Radio Network (PSRN): The Ministry of Health (MOH) is one of several Ministries involved in the Public Safety Radio Network project. Over the next three years, MOH will be working with the Government Mobile Communications Branch to design the Land Mobile Radio Network which provides reliable two-way radio communications between front line resources including dispatchers, paramedics, hospitals, Ornge and other interoperability users (e.g. OPP, Ontario Parks, local police and fire, etc.). Some of the key activities that will take place over this period include:

- MOH will conduct site visits, prepare site designs, make site infrastructure improvements (e.g. grounding, structural reinforcement), install and test new radio equipment at approximately 183 hospitals, 500 paramedic services ambulance bases and 22 communication centres (including Ornge and Toronto) and backup sites;
- MOH will train over 10,000 resources; and
- MOH will upgrade equipment in over 2000 vehicles and deploy over 4000 pieces of radio equipment.

Real-Time Data Feed for Medical 9-1-1 First Responders: HSC is leading the provincial rollout of the ministry's Real-Time Data (RTD) service with initial real-time dashboard implementations completed in May 2021. Enabling additional RTDS services, such as electronic patient care records, are ongoing and being planned in concert with the Paramedic Services. RTD enables medical 9-1-1 incident information to pass between Computer Aided Dispatch (CAD) systems in Ambulance Communication Centres (ACCs) and systems managed regionally by Paramedic and Fire Services. RTD operates on a vendor-agnostic Central Integration Platform (CIP), promoting regional provider innovation and flexibility. When 9-1-1 incident and patient care information is shared electronically in real time, Ambulance Communication Officers and first responders improve their situational awareness, avoid talk-time on radio, minimize quality assurance effort and improve patient journey reporting.

**Information, Privacy and
 Archives Division (IPA)**

Privacy Management Action Plan – Following on from a comprehensive current state analysis an action plan is being executed for privacy management that will uplift Ontario's privacy management capability. Early outputs include a privacy management program guideline, maturity assessment, risk management guideline and the establishment of a government-wide privacy management community of practice.

Integrating Recordkeeping into I&IT Projects – As part of the OPS Recordkeeping, Access and Privacy Transformation Strategy, IPA launched this project in early 2019-2020 to explore ways of implementing a "recordkeeping by design" approach. IPA leads this initiative and is in a strategic partnership with OPS Enterprise Architecture and Standards Branch. The project aims to develop a proactive, risk-informed, and value-add recordkeeping process equivalent to Privacy Impact Assessment (PIA). Expected deliverables include a set of guides and tools that will enable I&IT projects to conduct recordkeeping risk assessments early and incorporate related requirements into the solution's design from the start.

Email Management – The OPS is modernizing email management by moving from requiring OPS employees to manage every individual email to managing email at the email account level. A roles-based approach to the management of email accounts for the OPS has been proposed, based on the Capstone model developed by the United States National Archives and Records Administration (NARA). This approach categorizes roles in the public service and retains or disposes entire email accounts based on their significance. We propose using Office 365 retention policies to support implementation. Workforce Information Network (WIN) reports will support placing retention holds on email accounts of employees appointed to Capstone positions. OneDrive accounts of Capstone positions will also be retained.

Data Integration – Under the 2019 Ontario budget bill, Protecting What Matters Most Act, the Ontario Data Integration (DI) Framework includes a foundational set of requirements related to collection, use and disclosure of personal information, including privacy, transparency and accountability.

In consultation with designated DI Units, data standards are being developed for review and approval by the Information and Privacy Commissioner of Ontario to support the operationalization of the DI Framework. Applicable practices and procedures are also being developed to support implementation by each DI Unit.

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	<p>Private Sector Privacy Reform: Ontario is currently exploring proposals to introduce privacy protections and regulations related to the activities of private sector entities, including businesses, associations and not-for-profit organizations.</p> <p>Before Ontario proceeds with any specific proposals, MGCS will undertake detailed consultations with impacted stakeholder groups and members of the public. Virtual discussions will be organized in August and September with the following groups:</p> <ul style="list-style-type: none"> • Industry sectors; • The IPC; • Other jurisdictions; • Academic privacy experts; and • Members of the public (town hall) <p>Ontario will also be launching a digital consultation on Ontario.ca and the Regulatory Registry in August, which will remain open for submissions until the end of September. MGCS will be analyzing the results of the consultation and targeted a report-back with updated proposals by the end of 2020.</p> <p>Integrated Collections Management Software Solution (ICMSS) – The Integrated Collections Management Software Solution (ICMSS) is an IT project to procure a modern, integrated Software-as-a-Service (SaaS) solution. The ICMSS will replace the systems that currently manage and provide access to the collections, improving efficiency by removing duplication and integrating processes. IPA currently uses a number of disparate systems and older, non-compliant technology that limits its ability to efficiently and effectively provide enterprise strategic leadership and operational oversight to the Ontario Public Sector for a wide range of information management-related activities and provide the public with optimized user experience when accessing records of enduring value. The software solution will improve the customer online experience and better manage and preserve IPA's physical and digital holdings and better position IPA to meet current and future business needs and align to the Government of Ontario's 'digital mindset.'</p>	
<p><u>Infrastructure Technology Services (ITS)</u></p>	<p>Modern and agile infrastructure is the foundation of a digital organization. At ITS, we're building a digitally-driven government through workplace transformation - enabling staff to work anytime, anywhere, on any device, while leveraging modern, secure cloud-based connectivity methods and solutions. We're also modernizing infrastructure deployment, ensuring that IT projects, products and services are delivered effectively and efficiently to enable faster time to market for applications and rapid iterations. This foundational work will enable all ministries to drive their</p>	<p>Mohammad Qureshi Enterprise Chief Information Officer, Infrastructure Technology Services Mohammad.Qureshi@ontario.ca</p>

respective transformation agendas and deliver simpler, faster, better services for the people of Ontario.

COVID-19 has greatly shifted operational models for organizations across the globe. As Microsoft's [CEO Satya Nadella has said](#), "We've seen two years' worth of digital transformation in two months." To remain resilient in a post-pandemic world, future business models will increasingly depend on the ability for staff to work digitally to drive business outcomes. As the government considers a variety of modernization opportunities created by the pandemic, ITS is ensuring that its work continues to drive digital transformation - even as it is accelerated.

The following areas have been identified as strategic priorities for ITS:

Re-imagining the Digital Workplace Experience

- Delivering government services anytime, anywhere, on any device, enabling an agile workforce, leveraging modern and secure connectivity methods and cloud-based solutions.

Driving Enterprise Cloud Adoption

- Build on early success and accelerate enterprise cloud adoption to enable digital government through modern, innovative cloud services.

Delivering Value for Money

- Improve key processes that support efficient and effective ITS services, through modernized recoveries and strategic vendor management.

Maturing Data Driven Operations

- Using intelligent data to power future IT investment decisions, showing leadership through transparency and continuing to build trust with ministry clients and IT partners. This work will support key OPS priorities, while enabling ITS to make sound investment planning and financial forecasting decisions.

	<p><u>Running the Business</u></p> <ul style="list-style-type: none"> Enabling reliable IT services to Ontarians and the OPS through efficient and effective management and delivery of infrastructure services. 	
<p><u>Justice Technology Services (JTS)</u></p>	<p><u>Criminal Justice Digital Design (CJDD)</u></p> <p>Criminal Justice Digital Design will enable the flow of data, documents and media between the criminal justice system parties in near real-time. CJDD is a digital transformation roadmap focused on the lifecycle of a criminal case, where information is collected once, digitally connected and available to the people who need it, when they need it.</p> <p><u>CJDD includes:</u></p> <ul style="list-style-type: none"> New Courts Case Management Solution— A new criminal case management system to replace ICON to enable better workflow of matters through criminal courts. Prototype consultations with business are in progress. Digital Evidence Management Solution—Acquisition of a cloud-based Software as a Service (SaaS) vendor supported solution for use by Justice Sector partners/stakeholders to electronically capture, manage, store and share digital investigative/evidentiary files. A competitive and transparent procurement process is in progress. Criminal e-Intake— the electronic exchange between police and judiciary of charge packages and warrants. Pilot launched in Nov. 2019, expansion began July 2020. Digital Disclosure and Hearing Hub— cloud based online solution to enable E2E disclosure from police to prosecution to defense. <p><u>Virtual Courts</u></p> <p>In response to COVID-19, Ontario courts implemented virtual court appearances using video and/or audio conferencing for all pre-trial in-custody matters. While initial efforts have focused on criminal court appearances for pre-trial in-custody matters, work is also underway to support all types of court appearances.</p>	<p>Catherine Emile (A) Chief Information Officer/Assistant Deputy Minister Justice Technology Services catherine.emile@ontario.ca</p>

	<p>Moving to an end-to-end digital court experience under the Virtual Courts Strategy will focus on reducing in-person courthouse visits and demand for expensive, purpose-built courthouses, while delivering simpler, faster, better services.</p> <p><u>Public Safety Radio Network (PSRN) modernization project</u> In October 2019, following approval by Treasury Board/Management Board of Cabinet, the Ontario government announced a \$765 million investment in the Public Safety Radio Network (PSRN) modernization project—an initiative that will ensure our frontline and emergency responders can rely on the infrastructure and equipment needed to enable quick and effective responses to emergencies and keep Ontarians safe.</p> <p>As the current network uses older technology, it has become a challenge to maintain and modernization is critical. Issues experienced by the current network – including daily service outages, outdated equipment for which parts can no longer be found, lack of interoperability with other public safety radio networks, and lack of data encryption – compromise our frontline and emergency responders’ ability to react to emergencies and puts the safety of Ontarians at risk.</p> <p>To date, the project team has completed the largest of the planned procurements and has moved into design, validation, and planning the build and transition stages of the project.</p> <p>Since February 2020, the project has continued to move ahead with the design and build stage of the Radio Network, despite some challenges related to COVID-19. This included the successful (unprecedented) virtual Factory Acceptance Testing (FAT) and the first active radio test call on the network in early July, that confirmed readiness for a field pilot exercise (underway). As the project moves forward the team along with partner ministries across the OPS, will be busily building the new network and civil Infrastructure, testing end-to-end, and getting ready for transition. Transition will take approximately two years and will start in the Southwest Zone of the province.</p>	
<p><u>Land and Resources I&IT Cluster (LRC)</u></p>	<p><u>Ongoing Releases and Enhancements for Successfully Launched Solutions:</u></p> <ul style="list-style-type: none"> • Natural Resources Information Portal (NRIP): Additional business lines will be modernized onto the Natural Resources Information Portal over the next 5-6 years. 	<p>Rocco Passero Chief Information Officer Land and Resources I&IT Cluster Rocco.Passero@ontario.ca</p>

- **AgriSuite Modernization (OMAFRA):** Remaining calculators and functionality will be delivered in 6 releases.
- **Permissions Enterprise Platform (PEP):** Prioritized enhancements.
- **Mining Lands Administration System (MLAS):** Ongoing industry-requested improvements.

Laboratory Services Review and IT Modernization (MECP)

The Ministry of the Environment, Conservation and Parks (MECP) provides analytical laboratory services to support monitoring compliance, audit and emergency response needs. The ministry delivers high-quality testing, expert consultation, scientific reference service, method development and the application of relevant analytical technology. This project will replace legacy technology from the 1990s with a modern, scalable and expandable Commercial off-the-shelf (COTS) solution. Competitive procurement completed via a Request for Bids, with HORIZON Labs COTS solution selected as the vendor in May 2019. Project includes 10 major milestones, with target launch in December 2020 and final product acceptance in March 2021.

Anticipated Outcomes:

- Modernize current processes (60% are currently manual/paper-based).
- Streamline all business processes and improve/automate operations for the end-to-end service (from request intake to results returned).
- Reduced risk of system failure and data degradation.
- Consolidate side applications used for data and automate data collection and management.
- Meet high-level of standards for ministry International Organization for Standardization (ISO) accreditation.
- Improve business intelligence and performance measurement of laboratory performance

Compliance Re-Engineering and Information System Technology Project (CRISP)

The Ministry of the Environment, Conservation and Parks' (MECP) environmental compliance programs are designed to ensure that the activities of the regulated community and the public do not result in negative environmental or public health impacts. The ministry accomplishes this by providing front-line environmental compliance and enforcement services, and by ensuring corrective actions are taken

through inspection, investigation, and even prosecution to mitigate negative environmental impacts quickly and effectively.

CRISP is a major Digital First initiative that will enable MECP's commitment to be a modern regulator through the implementation of a modern compliance solution leveraging LRC's existing Oracle Siebel Platform. The solution, which will replace over five legacy applications, will support the streamlined Regulatory Profile Management, Compliance Monitoring and Assurance, Incident Management, and Investigation and Enforcement business streams and create a consistent and harmonizing user experience across all related programs. Release 3A was implemented on April 1, 2020, and release 3B is targeted for July 31st, 2020. Business usage of the new system is anticipated to begin August 4, 2020. It was delayed from April 1, 2020 due to COVID-19 impact to training.

Anticipated Outcomes:

- Response to non-compliance is focused on high risk sites including those with a poor compliance history. This will reduce the number of inspections for good actors and reduce regulatory burden and costs.
- Efficient on-line regulatory compliance services which will simplify and streamline how businesses interact with the ministry. This will include the ability to provide on-line reports and regulatory submissions.
- Improved tracking of MECP responses to all spills, environmental incidents and complaints
- Enhanced health and safety for MECP Provincial Officers by enabling the centralized tracking and monitoring of field staff using Geo -tracking devices.
- The inclusion of business-driven tools like data loading and SMART Inspection worksheets will enable MECP to rapidly onboard new programs with minimal cluster involvement.
- Focus on structured data will enable improved data analytics to inform risk-based (targeted) inspections of non-compliant businesses; as a result compliant businesses will experience fewer "unnecessary" inspections.

Northern Ontario Heritage Fund Systems Renewal Project

Replace the Financial Management System and the Financial Unified Northern Development System (FUNDS) with a new system that combines and replaces the FUNDS and Financial Management System (FMS).

<u>Ontario Digital Services (ODS)</u>	<ul style="list-style-type: none"> • Support implementation of the Patient IAA Pilot Project • Initiate and implement digital identity solution for Social Assistance Digital Application with MCCSS • Policy proposal for digital identity for government consideration and approval • Launch the Digital Identity program office – contingent on government approval of business case • Market engagement • Public engagement/consultations 	Robert Devries Assistant Deputy Minister, Platforms Cabinet Office Robert.Devries@ontario.ca
3. <u>Issues and Needs:</u> Briefly describe any issues you would like to share with the Council and what assistance you might be seeking from PSCIOC.		
<u>Central Agencies I&IT Cluster (CAC)</u>	<u>IT Source</u> <u>Enterprise Project and Portfolio Management Solution</u> Ontario competitively procured an EPPM with Planview Inc. in Fiscal-Year 2012-2013 and established a 10 year contract effective May 1, 2013. With the current EPPM VOR expiring on April 30, 2023, the Planview project team is preparing to brief Ontario's Information Technology Executive Leadership Council (ITELC) on proposed approach and next steps, which may include a first-step of market and user research to support the next generation of EPPM and report back to ITEL on a recommended strategy for the next generation EPPM solution for Ontario. As such, we would appreciate feedback from the Council on what other jurisdictions are doing around EPPM solutions.	Liz MacKenzie Chief Information Officer Central Agencies I+IT Cluster Liz.MacKenzie@ontario.ca
<u>Children, Youth and Social Services Information and Information Technology Cluster (CYSSC)</u>	<u>Data Management</u> <ul style="list-style-type: none"> • Alignment and direction for the overall master data management that enables data sharing between different ministries and government organizations. With data sharing, how to move to single record for citizens (adult, youth or kid) instead of multiple data records of the same person in different system of records. This mechanism can help and be used to uniquely identify the personal records in child welfare systems like CPIN and eliminate the possibility of creating duplicate records of the same person. • How best to implement for indigenous data requirements across government organizations and build common governance and guiding principles. This will 	Aklilu Tefera Chief Information Officer and Assistant Deputy Minister, Children, Youth, and Social Services I&IT Cluster Aklilu.Tefera@ontario.ca

	<p>enable systems like CPIN to follow standard guidelines and principles to manage indigenous data.</p> <p><u>Resourcing</u></p> <ul style="list-style-type: none"> • Staff require training on digital solution development practices and technology. • Need the ability to quickly ramp up/down based on workload. • Need to build digital mindset with our business partners that will help enable change management from current to future business processes. <p><u>Existing Technology Footprint</u></p> <ul style="list-style-type: none"> • Currently, the ministry has large monolithic applications that are costly to maintain and enhance. • Need to move to smaller, more agile applications that support larger systems of record. • How to transform legacy technology into digital tools in current fiscal climate. <p><u>Governance</u></p> <ul style="list-style-type: none"> • Current governance process is disconnected and does not support rapid, agile delivery. • Historical governance approaches need to be adapted to the new way of delivering services while ensuring stewardship of public resources. <p>The challenge will be to adapt a coherent, modern governance system across all levels of IM/IT government.</p>	
<p><u>Community Services I+IT Cluster (CSC)</u></p>	<p><u>Planning During a Pandemic</u></p> <p>It would be valuable to know the experiences across jurisdictions of building strategic, operational, and business plans during the COVID-19 pandemic, within a public sector context. This would include:</p> <ul style="list-style-type: none"> • Insights around how public sector information technology (IT) organizations are: <ul style="list-style-type: none"> - Adapting to major disruption to government planning cycles 	<p>Soussan Tabari, Chief Information Officer, CSC (416) 326-8216 Soussan.Tabari@Ontario.ca</p>

	<ul style="list-style-type: none"> - Developing IT plans in light of an ever-evolving context where priorities are constantly changing • Successful case studies for: <ul style="list-style-type: none"> - Effective joint business and IT strategic planning to inform new policy options - IT and policy/program partnership on business/operational model transformation and design 	
<u>Government Services Integration Cluster (GSIC)</u>	Would welcome the opportunity to share lessons learned related to contact centre services delivery transformation, best practices and approaches as we begin our journey with Contact Centre Modernization.	Renee Laforet, Chief Information Officer, Government Services Integration Cluster renee.laforet@ontario.ca
<u>Health Services I&IT Cluster (HSC)</u>	<p><u>Talent management</u> and the multi-generational workforce. The current workplace consists of four different generations: Baby boomers, generation X, millennials and generation Z. These generations have varying priorities, goals and values. Employers must be able to manage the expectations of these different workers.</p> <p>Concern for well-being is always critical but now heightened given circumstances arising from COVID-19. Stress in the workplace is often overlooked by employers impacting employee performance, engagement and loyalty.</p> <p><u>High Assurance Identity and Access Management</u> Ontario's Ministry of Health requires adequate provincial Identity and Access Management tools and services to ensure cost effective, secure and authorized access to systems and information for providers and patients, while complying with relevant legislation such as the province's <i>Personal Health Information Privacy Act, 2000</i>.</p> <p><u>Standards:</u> There is a need for a national organization to advance (or even enforce?) messaging standards and standard terminologies for health. Opportunities that would benefit from multi-jurisdictional investigation, leadership and support include:</p> <ul style="list-style-type: none"> • Common HL7-FHIR messaging standards • Adoption and maintenance of standardized drug terminology within each jurisdiction's Drug Information System and interfacing systems, for clinical as well as adjudication purposes (e.g. Canadian Clinical Drug Data Set (CCDD)) 	Karen McKibbin Chief Information Officer Health Services I+IT Cluster Karen.McKibbin@ontario.ca

	<ul style="list-style-type: none"> • Adoption and maintenance of the standardized immunization terminology in the Canadian Vaccine Catalogue (CVC), the comprehensive national source-of-truth for all vaccine-related terminology content. • Immunization schedules are complex, vary across the country, and change frequently as new vaccines are licensed. People rely on public health nurses and their doctors and other health care providers to help them know what immunizations are needed and when. The CVC is critical to ensuring that citizens and their health care providers can access and share accurate, comprehensive, life-long digital immunization records, increasing Canadians' confidence in their ability to manage their immunizations and supporting more informed discussions with their doctors • Four EMR vendors (Accuro/QHR, Oscar, YMS, Indivica) are currently aligning with the CVC as part of Ontario's EMR DHIR integration work. • The CVC was funded by the Public Health Agency of Canada (PHAC) until March 2019. The funding gap to support API development and ongoing sustainment support costs is now at a critical juncture as CVC work, including APIs supporting the EMR DHIR project, has stopped and expected to impact integration and adoption timelines for the project. Workflows of public health units for immunization programs will also be impacted, and nationally. immunization interoperability goals are in jeopardy. <p><u>Scaling for Growth</u> There is a need to identify opportunities where scaling for future growth can be implemented into existing business systems. Enhancements to I&IT systems are implemented on an as needed basis, for example, finding efficiencies in existing costs or new legislative requirements. As delivery of public health care solutions continues to grow, existing and new systems are required to do more.</p>	
<u>Ontario Digital Services (ODS)</u>	<ul style="list-style-type: none"> • Direction on collaborative opportunities via Joint Council (or PSCIOC table), namely shared sandbox environment for verifiable credentials. • Direction / decision on aligning public sector PCTF with that of DIACC and standards development of the CIOSC 	Robert Devries Assistant Deputy Minister, Platforms Cabinet Office Robert.Devries@ontario.ca
4. Topics of Interest: Please identify topics of interest to your jurisdiction for future PSCIOC meetings /teleconferences.		

<u>Central Agencies I&IT Cluster (CAC)</u>	<u>Cluster Applications Branch</u> <u>ePayment Processing</u> Information on what other jurisdictions are doing in support of electronic payments (debit/credit/paypal etc.,) or other modern digital options for tax payments? <u>Staffing/Training</u> Free, effective staff training on speedy digital solution development practices/technology. <u>Technology Footprint</u> Managing the reuse of technology. <ul style="list-style-type: none"> • Sharing technologies across IT Clusters; with one central owner most effective methods for managing priority/agility in a shared technology model. • Limit the technology footprint through re-use (with some customization) vs. creating/purchasing technology in smaller chunks that is a perfect fit for the need. <u>Business Services & Management Branch</u> Use of Robotics for business process improvement	Liz MacKenzie Chief Information Officer Central Agencies I+IT Cluster Liz.MacKenzie@ontario.ca
<u>Children, Youth and Social Services Information and Information Technology Cluster (CYSSC)</u>	<ul style="list-style-type: none"> • The usage of public cloud for high sensitivity data given data sovereignty laws/ freedom of information acts in US/Canada /cyber security policies. • Cross-provincial collaboration on sharing best practices in the area of data governance, master data management and analytics. 	Aklilu Tefera Chief Information Officer and Assistant Deputy Minister, Children, Youth, and Social Services I&IT Cluster Aklilu.Tefera@ontario.ca
<u>Government Services Integration Cluster (GSIC)</u>	<ul style="list-style-type: none"> • The usage of public cloud for high sensitivity data given data sovereignty laws/ freedom of information acts in US/Canada /cyber security policies. 	Renee Laforet, Chief Information Officer, Government Services Integration Cluster renee.laforet@ontario.ca

<u>Health Services I&IT Cluster (HSC)</u>	<p><u>Inspections of long-term care</u> (LTC) homes are complex and ever changing to maintain alignment with legislative requirements. The systems used to manage inspections of LTC homes are similar in concept to Customer Relationship Management (CRM) solutions with workflow rules. It would be interesting to know if other jurisdictions have a single CRM used for multiple inspection purposes E.g., Inspections for LTC homes, hospitals, daycares, water treatment facilities, environment standards and others.</p> <p><u>Claims Processing</u> We are currently reviewing options to modernize our claims processing (medical, pharmaceutical, assistive devices, etc.) and would be interested in hearing from other jurisdictions as to how they have modernized their approach.</p> <p><u>Communications of Solutions</u> HSC delivers 230+ business systems for 14 million customers and supports \$61 billion in expenditures. HSC solutions are robust, secure and always on. The general public may not necessarily be aware of the wide range of health care sector technology solutions being delivered by the Province to ensure that Ontarians are and remain healthy. This possible lack of awareness may be a hindrance to Ontarians in fully utilizing the digital health solutions available to them.</p>	<p>Karen McKibbin Chief Information Officer Health Services I+IT Cluster Karen.McKibbin@ontario.ca</p>
<u>Information, Privacy and Archives Division (IPA)</u>	<p>Private sector privacy legislation and resource implications to public sector and oversight bodies.</p>	<p>John Roberts, Chief Privacy Officer, Archivist of Ontario and Chief Information Security Officer, Information, Privacy and Archives Division and Cyber Security Division john.roberts@ontario.ca</p>
<u>Land and Resources I&IT Cluster (LRC)</u>	<ul style="list-style-type: none"> • Enabling remote work: Telework programs, flexible work arrangements • Business modernization during COVID enabled by technology 	<p>Rocco Passero Chief Information Officer Land and Resources I&IT Cluster Rocco.Passero@ontario.ca</p>
<u>Ontario Digital Services (ODS)</u>	<ul style="list-style-type: none"> • Potential to demonstrate solutions/work on Patient IAA and MCCSS-SADA projects 	<p>Robert Devries Assistant Deputy Minister, Platforms Cabinet Office Robert.Devries@ontario.ca</p>



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**Infrastructure Technology
Services (ITS)**

- ITS is interested in hearing how the COVID-19 pandemic has impacted other jurisdictions' long-term strategies in key areas (e.g. network design, infrastructure, cloud adoption, mobile technology adoption/migration)

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