

Digital Investment Board

Annual Report **2020-21**



Message from the Chair

On behalf of the Digital Investment Board, I am pleased to present the Board's first annual report for 2020-21.

The government is working to modernize and provide simple, user-centric, digital services to the people of British Columbia. We aim to meet and surpass the expectations of the people and businesses we serve.

Our Digital Investment Board provides leadership in modernizing government. Its work includes overseeing government investment in digital products and services. It also drives a vision for digital government.

2020-21: Covid-19 Created a New Imperative for Digital Services



The COVID-19 pandemic has highlighted the need for the Government of British Columbia to continue to focus on digital innovation. As a result of the pandemic, many programs and services had to pivot and adapt to a reality where in-person interactions were not possible. This new reality increased the need for digital solutions to support new ways of serving people and businesses. The pandemic made our commitment to transforming and modernizing government in B.C. more critical than ever.

Last year, the Digital Investment Board approved an additional \$9 million for digital products to support essential government services during the pandemic. Though a small portion of government's overall digital spending, these projects helped provide digital access to COVID-19 lab results and enabled home health monitoring for COVID-19 cases. You can read about many more such projects in this report.

Highlights from Our Portfolio of Digital Products

This report highlights key capital funded digital projects over the past year. These accomplishments demonstrate our commitment to delivering better government services for British Columbians. As a government, we made significant progress towards aligning with our <u>digital principles</u>. We prioritized service excellence, promoted building tools that work for people, and worked to maximize the value of our investments.

Last year, government invested approximately \$100 million in capital across 84 projects to improve digital services. Since 2015, the number of projects approved each year by the Board has nearly doubled and the budget has increased in response to demand. This trend highlights the growing importance of digital products in meeting the expectations of the people we serve.

Over the past year, we have significantly improved how we fund digital projects. With these improvements, we can better support the use of modern digital techniques like agile delivery. We also improved our technical reviews of digital project proposals through a new Digital Support Team.

There were many successful projects delivered last year, including some that were part of our response to the COVID-19 pandemic. We highlight five of the successful projects as case studies in this report:

- The Foundry BC app and portal to support youth wellness
- <u>The Verify by Video service</u> to help people confirm their identity on the BC Services Card mobile app
- The Emergency Management portal to support people in an evacuation
- The Mines Digital Services project to improve access to mining information
- <u>The Dormant Sites Reclamation project</u> to develop an online portal that streamlines the clean up of unused oil and gas sites

I would like to recognize digital teams across government for their dedication to providing modern services to people and businesses across British Columbia. These dedicated public servants are critical to the successes you will read about in this report. On behalf of my fellow board members, thank you.

I would also like to recognize my fellow board members for their commitment to driving a coherent, results-oriented vision for digital products that help people and businesses. I am proud to work alongside these committed leaders to improve the services that people count on.

Sincerely,

Shann Brown

Shauna Brouwer Chair, Digital Investment Board August 2021





Meet the Digital Investment Board



Shauna Brouwer (Chair) Deputy Minister, Citizens' Services



Kevin Jardine (Vice Chair) Deputy Minister, Environment and Climate Change Strategy



Shannon Baskerville Deputy Minister, Advanced Education and Skills Training



Allison Bond Deputy Minister, Children and Family Development



David Galbraith Deputy Minister, Social Development and Poverty Reduction



Tiffany Ma Assistant Deputy Minister & Deputy Secretary to Treasury Board



Peter Pokorny Associate Deputy Minister, Health



CJ Ritchie Associate Deputy Minister and Government Chief Information Officer



Bobbie Sadler Head of the B.C. Public Service Agency, Ministry of Finance



Mark Sieben Deputy Solicitor General, Ministry of Public Safety and Solicitor General

Digital Investment Board 2020-21 Annual Report

Executive Summary

This report summarizes the work of the Digital Investment Board (the Board). The Board is a committee of Deputy Ministers that provides oversight for government's investments in digital services. The report identifies trends in digital investment. It also summarizes projects that the Board approved over the past year and how the funds were spent.

Every year, the Government of British Columbia invests millions in technology and digital services. These products support the needs of people, businesses, and government employees. They enable the delivery of programs and services to British Columbians.

Background

In 2012, the Digital Investment Board was granted authority to oversee capital funding for digital products. This authority is for proposals under \$20 million in total and less than \$10 million per year for government technology and digital services. The Board was also given a mandate to set the strategy for government's digital projects and manage the capital funding budget for government technology and digital services.

The Board is chaired by the Deputy Minister of the Ministry of Citizens' Services. It manages the budget process for capital projects for technology and digital services for government ministries. Its responsibilities and accountabilities are outlined in its <u>Terms of Reference</u>.

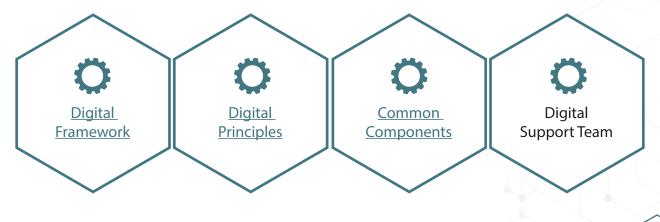
Digital investment is Evolving

In B.C., the capital budget for digital government services has nearly doubled in the last seven years. At the same time, the average cost of projects is getting smaller and it is taking less time to deliver new digital services.

These trends demonstrate that there is increased demand for digital services and technology across government. It also suggests that how government manages digital projects is evolving, increasingly aligning with best practices for agile project management.

The Vision

The Digital Investment Board is working to provide all British Columbians with fast, easy access to better government services using modern technology. It is also working to ensure that that technology is sustainably and responsibly managed. People can learn how government is working to implement this vision at <u>digital.gov.bc.ca</u>.



Digital Investment Board 2020-21 Annual Report

Year in Review

In 2020-21, the Board had a budget of \$110 million. Of this, ministry teams spent \$99 million on 84 projects and \$11 million was put aside for future years. In 2020-21 the Board also approved 22 new projects and oversaw 27 projects that were completed.

The Board oversaw efforts to modernize government's operating model for digital services. It also oversaw work to update how government provides shared services to digital teams. The Board worked to create greater predictability for ministries applying to access capital funds.



Contents

MESSAGE FROM THE CHAIR	2
Meet the Digital Investment Board	4
EXECUTIVE SUMMARY	5
BACKGROUND: DIGITAL INVESTMENT IN THE GOVERNMENT OF B.C.	8
Creation of the Board	8
How the Board Manages Digital Investment	10
What the Digital Investment Board does	11
Annual Approval Process for New Projects	12
DIGITAL INVESTMENT IS EVOLVING	14
The Overall Budget for Technology and Digital Projects is Increasing	14
Projects are Getting Smaller	14
A STRATEGIC VISION FOR DIGITAL GOVERNMENT	16
Digital Framework	17
Digital Principles	17
Common Components	17
Digital Support Team	17
2020-21 – A YEAR IN REVIEW	18
Highlights of Key Accomplishments in 2020-21	18
The Digital Response to COVID-19	19
Case Studies	20
Foundry BC App and Portal Support Youth Wellness	20
BC Services Card – Innovative	21
Emergency Portal Fast-Tracked Across B.C.	23
Digital Services Replace Former Paper-Based Mines Records	25
Online Portal Streamlines Clean Up of Oil and Gas Dormant Sites	26
Comprehensive List of all Funded Projects	27

Background: Digital Investment in the Government of B.C.

Creation of the Board

The Digital Investment Board has delegated authority to oversee capital funding for government technology and digital services.

The mandate of the Board includes:

- Setting, managing and monitoring a strategic vision for digital government in the Government of B.C.
- Overseeing digital investment.

The Board's responsibilities and accountabilities are outlined in their Terms of Reference.



Digital Investment Board 2020-21 Annual Report

DIGITAL INVESTMENT BOARD MANDATE

 Advance a strategic vision for digital government; and

 Oversee digital investment, including supporting coherence across government, prioritizing investments, and maximizing the value of the investments.

How the Board Manages Digital Investment

The Board sets the strategy for delivery of digital services. This includes identifying opportunities to improve how services are delivered and how technology is used in government.

The Board provides funding to B.C. government ministries for digital products that improve government services for people in B.C.. Support for these products is provided through access to capital funding, a type of funding that is reserved for building or buying digital products.

The Office of the Chief Information Officer (OCIO) provides support for the Board. A team within the OCIO manages the funding process, reviews funding proposals and monitors results for funded projects. The OCIO also sets policy and standards for information management and information technology within the B.C. government. This guidance provides direction to ministries on how to use digital technology to improve service delivery.

Each ministry manages the delivery of its digital products after funding has been approved by the Board. Ministries provide regular project updates to the OCIO and report back to the Board as required.



What the Digital Investment Board does

The Board manages the budget process for capital projects for technology and digital services for government ministries. The Board's responsibilities and accountabilities are outlined in their <u>Terms of Reference</u>.

Responsibilities and Accountabilities	
Oversee digital investment	The Board oversees investment in digital services for all of government and provides strategic direction to make sure that government priorities and people's expectations are being met
Manage spending	The Board manages the capital budget for technology and digital services projects. It sets the criteria for how the budget will be spent to get the best outcomes
Approve spending plans	The Board approves spending plans each year. It also sets the three-year and 10-year plans
Monitor projects	The Board oversees how projects are monitored and ensures that specific conditions for major projects set by Treasury Board are met
Oversee strategy	The Board develops strategy to improve digital services for people
Maximize value for money	The Board ensures that technology and digital spending creates value
Meet public needs and expectations	The Board works with the Citizens' Experience Board to ensure that future technology and digital projects meet public needs and expectations

The Board has authority for digital products that cost less than \$20 million in total and less than \$10 million per year. If projects cost more than these limits, then they must also be approved by Treasury Board.

Digital Investment Board 2020-21 Annual Report

Annual Approval Process for New Projects

Every year, the Board invites ministries to propose new digital projects that meet strategic objectives and mandate commitments. Ministries present priorities for new projects by submitting short proposals referred to as concept cases. The OCIO reviews the concept cases to identify which ones are highest priority.

How the Board Reviews Projects

The Board asks ministries to describe why the project is needed and what the benefits will be. Five areas are reviewed to decide whether a new project can be accepted:

- Strategic alignment how the project fits with government strategic plans and mandate letters
- Business need how the project solves a problem or improves a service
- Architecture alignment how well the project meets expected technology standards (see page 17)
- Value and risk whether the benefits are greater than the risks
- Relative prioritization how all projects are ranked to meet government's priorities and maximize the value for the people of B.C.

This process makes sure that the highest priority projects are funded first.

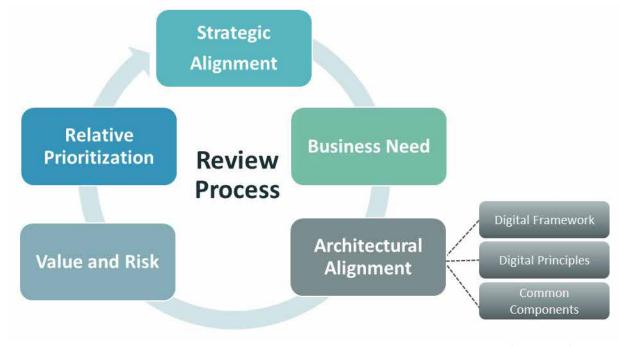


Figure 1. Factors in assessing new projects

The highest priority concept cases are then refined; Ministry teams add more detail and submit them to the OCIO as a business case. **Figure 2** outlines the process.

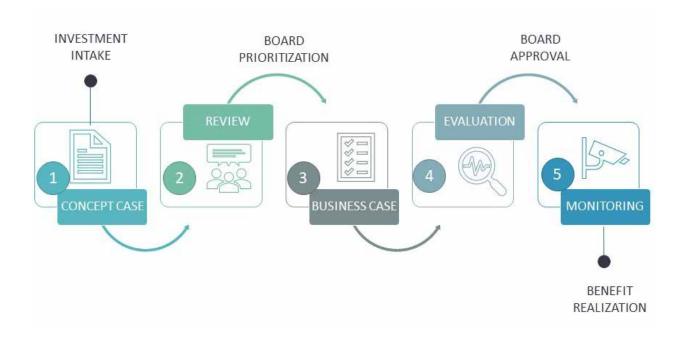


Figure 2. The Board approval process for new projects

- 1) Ministries submit their priorities as concept cases
- 2) The OCIO reviews the concept cases based on the criteria the Board has set and recommends which ones the Board should accept
- 3) If the Board accepts a project, the ministry develops a business case with more information. The business case states how the project will make services better. It also describes the technology, timeline, budget and measurable outcomes from the investment
- 4) The OCIO reviews the business cases and makes recommendations to the Board
- 5) If the business case is approved, the ministry receives the funding. Each ministry is responsible for carrying out the project and reporting on progress to the OCIO, including milestones, budget, and final outcomes

Digital Investment is Evolving

The demand and corresponding budget for digital projects has increased since the Board was created. At the same time, the average cost of individual projects has decreased and the time to deliver has also reduced.

The Overall Budget for Technology and Digital Projects is Increasing

Over the last 10 years, the overall budget for funding technology and digital services across government has grown. It has increased from \$44 million in 2014-15 to \$110 million in 2021-22. This increase reflects growing demand across government for resources to provide digital services.

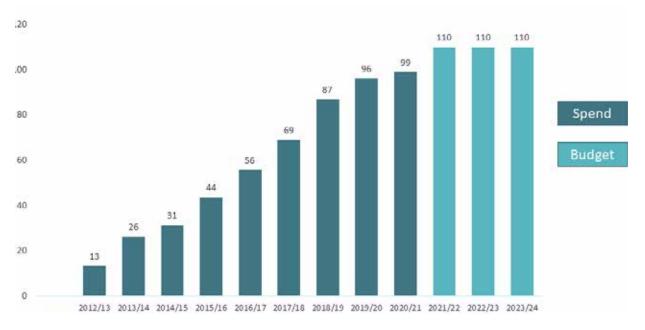


Figure 3. Capital Spend on technology and digital projects

In 2015, ministries were working on 53 projects. In 2020, there was a total of 91 digital projects underway. Overall, 160 projects have been funded to improve digital services since the Board was formed. As discussed below digital products are being delivered more quickly and at a lower cost than they were in 2014.

Projects are Getting Smaller

The average length of projects has gotten shorter over the years. The average length of a project funded by the Board decreased from six years in 2014 to two years in 2021.

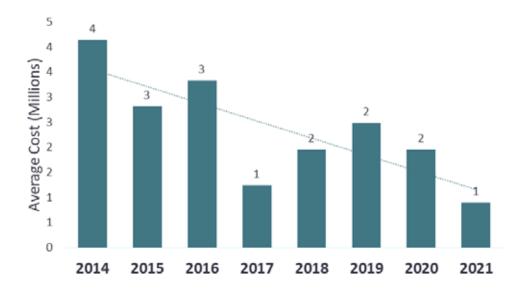
While the total budget that the Board manages has increased over the years, the average cost of an individual project has declined. The average value decreased from \$4.14 million in 2014 to \$1.9 million in 2021.

Overall, the Board welcomes the trend towards smaller value projects with shorter timelines. Research¹ shows that smaller projects have less risk of failure. The larger a project is in value, and the longer its timelines, the greater the risk that things will go wrong.



Average Length of Projects is Getting Shorter

Average Cost of Projects is Getting Smaller



Figures 4 and 5 show that the average project budget and length have fallen over time

1 Reference for Standish Group: https://www.researchgate.net/publication/220419735 The impact of size and volatility - On IT project performance

A Strategic Vision for Digital Government

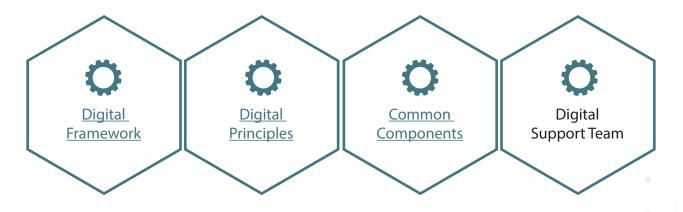
The Board sets the vision for digital government. A digital government uses modern technology and practices to provide excellent services that meet the needs of people. The Board provides sound governance to support this vision.

In practical terms, the Board's leadership for digital government means that the Board is putting in place common approaches for government services and prioritizing areas for investment. Ultimately, this means that the B.C. government can deliver the best possible digital services to all people.

The Office of the Chief Information Officer (OCIO) supports the Board to deliver its vision. The OCIO sets out how technology should be used throughout government outlined at <u>digital.gov.bc.ca</u>. This ensures that projects are aligned to government strategy and mandates and are designed to:

- meet the needs of people
- have strong security and privacy
- re-use technologies where possible to reduce cost and keep things simple , and
- provide value for money.

Below are some of the ways that the OCIO supported digital services in BC in 2020-21.



Digital Framework

The <u>Digital Framework</u> launched in 2019. It gives a vision for how digital can improve services. It describes the ways government and the public can use digital technologies².

This framework is used to review proposals for new projects.

Digital Principles

The <u>Digital Principles</u> guides how teams design and develop digital services³. The principles are a set of guiding ideas, such as trust, inclusion, transparency, and cultural sensitivity.

The Board encourages ministries to make sure their projects follow the Digital Principles. Increasingly, ministries are successfully reflecting the principles in their new projects.

Common Components



When a team starts a new project, they may waste time and resources repeating the work of other projects.

Many digital services use similar elements, such as notifications or fee payments. Sharing and re-using common components like these allows a team to deliver digital services more quickly and with less cost.

The Board expects digital projects to use <u>common components</u> for their projects.

Digital Support Team

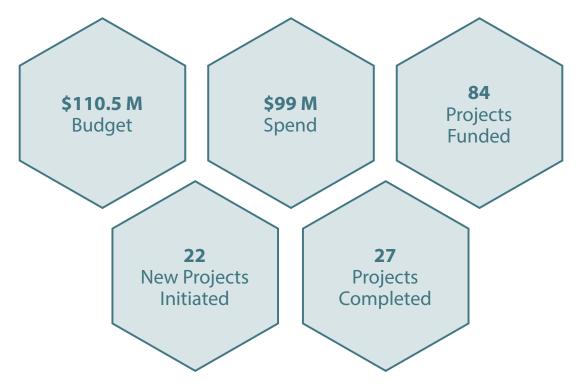
The Digital Support Team helps teams proposing new digital services to make sure their projects line up with the Digital Principles and use common components. Created in 2020, the team of technical experts review proposals and work with project teams.

The Board set up the Digital Support Team after getting external advice and hearing feedback from ministries.

2020-21 – A Year in Review

Key Accomplishments and Key Figures of 2020-21

In 2020-21, the Digital Investment Board (the Board) had a budget of \$110 million. Of this total, \$99 million was spent on 84 projects and \$11 million was allocated for 2021-22 projects.



This budget funded a wide variety of digital projects including the digital response to the COVID-19 pandemic. Five of these projects are discussed as case studies in the next section of the report. The report also includes a comprehensive list of all funded projects. Some highlights include:

- The Student Information System, which allows ministry staff to monitor how well post secondary students are doing, and lets students manage their student loans
- The Health Information Exchange, which allows health providers to securely share health data with patients
- Tax system updates to support the roll out of the employment incentive program for employers who increase their payroll and a new provincial sales tax refund for certain equipment
- The BC Recovery Benefit Program project to administer benefits to people during the pandemic
- The Court Services Online project to provide additional online services to people

The Digital Response to COVID-19

During the COVID-19 pandemic, the Board approved an additional \$9 million towards digital products to support key government services. This funded new work to enhance existing digital products as well as new products. The new digital products were prioritized to provide such services as:

Self-management

- Easy access to COVID-19 information and resources
- Online access to COVID-19 lab results for people and health providers

Virtual care

- Simplified systems for providers to consult and provide care to patients by phone and online
- Home health monitoring for COVID-19 cases and contacts

Digital partnership

• Digital tools to support agencies working on COVID-19 response programs



Figure 7. A number of digital products delivered through projects funded as part of the response to the COVID-19 pandemic.

Case Studies

Foundry BC App and Portal Support Youth Wellness

Foundry is a network of health and social service centres for young people in B.C. It offers one-stop access to care and support to reach young people before health challenges become serious problems.

The Challenge

When COVID-19 hit in 2020, many counselling sessions and in-person support meetings ended to avoid the risk of spreading the virus. Foundry quickly saw how the mental health of young people suffered as a result. Young people's needs for help increased because of physical distancing, job cutbacks and concerns about loved ones. At the same time, restrictions meant that other ways to support people were needed.

Foundry staff worked quickly to find innovative solutions. They developed drop-in counselling services via chat, voice or video calls. Online registrations let them offer limited walk-in counselling services and workshops. These first steps helped many young people, but more was needed to reach isolated youth and support workers.

The Solution

Foundry discussed ideas with its partners and with youth and family teams. To extend what Foundry was doing, they agreed that a smart phone app and virtual portal could help young people get the services they needed. Those in locations where Foundry has no inperson services could find information and resources designed for B.C. youth offered by other organizations.

The ministries of Health and Mental Health and Addictions partnered with Foundry BC to create the new services. The app and virtual portal went live in May 2021.

The Results

The Foundry app gives youth and their caregivers faster, easier access to services and supports related to mental health and substance use. A Foundry portal and phone line offer internet access for those with no smartphone service.

Through a single app or web portal, users can attend drop-ins and book counselling, primary care, peer support and group sessions. Other resources include information pages and planning guides that help health staff to support young people. Health professionals also use the resources to offer support to young people.

Foundry's app and portal directly connect B.C. youth with local connections and services. Created to meet pandemic needs for virtual services, they will continue to evolve over the coming year. New features such as wellness goal setting, tools to track medications, employment supports and a "circle of care" will allow youth and caregivers to find local information and collaborate online.

BC Services Card – Innovative Service Confirms ID by Video

Over 4.8 million people in B.C. have a BC Services Card and can use it to prove their identity and access government services in person. The card is issued through a robust identity proofing process by the Insurance Corporation of BC (ICBC), that confirms the individual is who they say they are. Individuals can opt to use their card with a mobile device to set up the BC Services Card mobile app, enabling them to use their mobile BC Services Card to access a number of services online.

The BC Services Card mobile app was launched in April 2018 and lets people use their smart phone or tablet as a digital representation of their card. Since then, more than two dozen services have launched that accept the mobile BC Services Card for access online, ranging from accessing health and vaccination records, to registering a business, or applying for and managing student loans. People in B.C. can also use their mobile BC Services Card to securely access federal services like employment insurance and tax information.

A list of available services that can be accessed with a mobile BC Services Card can be found <u>online</u>.

The Challenge

To activate a mobile BC Services card for online use, people used to have to confirm their identity in person. However, in-person identity verification was inconvenient – people needed both the time and ability to travel to a Service BC location during business hours. And later, during the COVID-19 pandemic, in-person visits to offices became even more challenging. Service BC needed better options.

The Solution

Initially, Service BC launched the Verify by Video service, within the BC Services Card mobile app, with Video Call. This option conveniently offered identity verification by Service BC representatives through live video chat, avoiding inconvenient in-person visits.

In response to the COVID-19 pandemic, Service BC expanded the Verify by Video service, to create additional capacity, and launched the second Verify by Video option, Send Video.

With Send Video, individuals can take a photo and a short video of themselves and send it to Service BC for review. Within a few hours, Service BC can confirm the user's identity and activate the mobile BC Services Card. The individual can then use the app on their mobile device to easily and securely access online government services.

The Results

The Verify by Video service options make it easier for residents to use their BC Services Card to gain online access to the services they need. The remote-access option streamlines the identity verification process and reduces COVID-19 risks.

British Columbia is the first jurisdiction in North America to use video to verify identities. Both the BC Services Card and the mobile app meet the high standards for security and privacy required by B.C. law.

By mid-2021, over 740,000 people have verified their identity with Service BC to activate their mobile BC Services Card for online use. Through the service, they get easy access to B.C. and Government of Canada services without the need to line up in-person.

If you want to set up the BC Services Card on your mobile device, activating the mobile card is a <u>simple process</u>.



Emergency portal fast-tracked across B.C.

An emergency may affect a few people in a house fire or a whole region as in the devastating wildfires of 2017 and 2021. When B.C. residents face a crisis like a fire or flood, Emergency Management BC (EMBC) steps in to help manage the emergency.

The Province experienced extreme wildfire and flooding events in both 2017 and 2018. As a result, EMBC modernized its services. One step was to create an online registration portal for people affected by an emergency. This portal would let people register for help such as accommodation or food. An online portal would let businesses and others be paid back for materials and services they provide. And an advanced data system would give EMBC managers complete information about the situation.

In 2020, EMBC launched the improved service with a pilot test in four communities: the City of Kamloops, the City of Prince George, the Regional District Central Okanagan and Tk'emlúps te Secweépemc. The Evacuee Registration and Assistance (ERA) tool greatly supported First Nations, Local Governments and evacuees across the province in the 2021 Wildfire response.

The Challenge

The COVID-19 pandemic gave the project new urgency in 2020. In the pandemic, emergency managers could not ask evacuees to gather and line up to register or to apply for emergency support. Gathering hundreds of people to complete paper forms or to receive food and other supplies would risk spreading the virus. The new online system that would let people register remotely became even more critical. EMBC needed to fast-track a province-wide rollout of the new online system.

The Solution

EMBC accelerate the rollout of its new online system. Instead of launching the online system in stages, it would expand to the whole province at the same time. The EMBC modernization team revised its workplan. Its new goal was to meet the public health need for distancing.

The Results

A new timeline moved the launch of the Evacuee Registration and Assistance program (ERA-1) ahead to April 1, 2020. Phase one included the launch of the new online portal. The portal lets users register their location and apply for support wherever they might be. It reduces inperson lineups so that users can report their location and contact information safely.

In addition, phase one allows suppliers to send invoices for emergency services and materials through the online portal. This will help suppliers get paid more quickly.

By January 18, 2021, 4,746 people used the ERA tool to self-register at 67 emergency events. In addition, 660 users joined 92 training sessions to learn how to use ERA. In all, 75 teams of response managers had begun to use the tool.

The project meets commitments to improve emergency services following the 2017-2018 seasons. The new program will help people quickly and safely get support in an emergency. It will also help the teams of emergency workers around B.C. respond quickly and efficiently in an emergency and with all the facts available.



Digital Services Replace Former Paper-Based Mines Records

B.C. needs to manage its mining industry to support jobs and the economy and to protect the environment. To achieve these objectives, the government collects a great deal of information, much of it in separate data systems. This separation made it difficult for people to find, view and use key information for decision making.

A new online system brings the data together in an easy-to-use format. It connects data systems across B.C.'s natural resource ministries and provides intuitive meaningful information to the public.



The information technologies B.C. used to oversee mines were varied and disconnected. The system from the 1990s used stand-alone files in separate systems. Reports and information used different formats and were not linked together. Staff relied heavily on manual processes and members of the public found the system was difficult to view and interact with. This made it very difficult to get the data needed to make evidence-based and informed decisions.

The ministry responsible for mining needed to find a better way of managing and sharing its data. Sharing its data online made sense. This would make it easier for mining companies, Indigenous people, communities, and government staff to find reports and information.

The Solution

The team reimagined the whole technology system used to oversee mines. They set to work to revamp the outdated mine management system.

The team created and tested ways to meet legal requirements while satisfying the needs of their users. They developed a series of ideas and demonstrated them to real users. Using a step-by-step process, they released updates every few weeks and received feedback on what was still needed. By using software elements that are widely available and well known, the project took much less effort – and less cost – than it would take to create new programs.

The Results

The team has developed a new digital system and continues to expand and refine it. It uses three new applications:

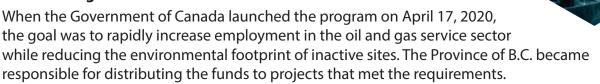
- A new database called CORE was created to hold all major and regional mine record information. Staff use CORE to track data such as a mine's name, number, operating status and the product being mined
- A portal called MineSpace links mine operators directly to the ministry. It lets mining staff securely see their information in CORE and send reports electronically. They no longer need to make a call or visit a ministry office. The new process saves their time, as well as the time that ministry staff need to locate, review and file the documents
- <u>BC Mine Information</u> makes data on major mines available to the public. Anyone can look up mining locations, download documents and view inspection records

Online Portal Streamlines Clean Up of Oil and Gas Dormant Sites

B.C. requires oil and natural gas operators to restore drill sites after the sites are no longer active. During the COVID-19 pandemic, the Government of Canada provided funds to support this clean-up work. The funds were to create jobs by helping contractors in the oil and gas sector restore dormant sites to their pre-activity state. (Dormant sites are those that have not been active over a period of time.⁴)

B.C. received \$100 million to use in its <u>Dormant Sites</u> <u>Reclamation Program</u> (DSRP) and another \$20 million for related clean-up programs.

The Challenge



B.C. government staff needed to select suitable projects efficiently and get funding distributed within tight deadlines.

The Solution

Mines Digital Services (MDS) already had an experienced team developing software for the Ministry of Energy, Mines and Low Carbon Innovation. The team uses an "agile" approach – it develops applications in small pieces, tests them and improves them as each step is successful. The MDS Agile team took on development of the dormant sites program, working together with ministries and agencies across government.

The team first developed an online portal to receive and process applications. In only two weeks, the team designed and built a program that contractors could use to submit projects. The full system now lets staff track applications and monitor costs and compliance.

The Results

In the first week after the portal went live, 107 contractors successfully sent in 1,661 applications. These represented 61 oil and natural gas permit holders and 3,348 dormant well sites in B.C.

The investment has many benefits:

- It supports jobs for B.C. workers in the oil and gas service sector. This helped to restart the economy and clean up the environment at the same time
- It allows B.C. to restore lands that have environmental and cultural importance and to reduce the long-term damage from oil and gas exploration

• It streamlines the work that contractors and ministry staff do to restore B.C.'s dormant sites

4 https://www.bcogc.ca/what-we-regulate/oil-gas/dormant-sites/

Comprehensive List of all Funded Projects

Below are the minor information management and information technology capital projects funded by the Board in 2020-21 to improve digital services.

Investment Name	Investment Description	
The Ministry of Advanced	Education and Skills Training (AEST)	
Student Information Management System (SIMS)	This project will replace existing information systems so ministry staff can monitor student performance and manage loans.	
The Ministry of Education (EDUC)		
Education Data Warehouse 2.0	This project will allow the Ministry of Education and its partners to collect, manage and analyze education statistics efficiently and securely while enhancing data visualization and insights for the ministry.	
Modernization of Deprecated OpenVMS Applications	This project will replace two outdated technologies with a single system to track capital investments in school districts throughout B.C. and provide students and schools better access and reporting on transcript information.	
Personal Education Number Registry (PEN) Registry	This project will modernize the existing application, link the PEN to the BC Services Card Program, and improve access registration for early learning, B.C. K-12 and post-secondary schools.	
The Ministry of Health (HLTH)		
Digital Health Trusted Interactions	In response to COVID-19, this initiative will enable health care providers to easily and securely access prescription claim processing online through pharmacy and clinic electronic medical record systems eliminating the need for issuing paper credentials.	
Mental Health Substance Use Virtual Care	This project will develop smartphone applications to help young people and their families, paramedics, and dispatchers access care for mild-to-moderate mental health and/or substance use challenges.	
System for Contracts, Resourcing, Utilization and Budget Solutions (SCRUBS)	This project allows the Ministry of Health to manage program budgets and contracts more effectively.	

Investment Name	Investment Description
Transform Information Technology (IT) Service Management	This project will improve and modernize IT Service Help Desk services for Ministry of Health staff.
Integrated Health Clinical Readiness	This project will allow for better management of clinical and patient data, improving patient safety.
Drug Management (Integration)	This project will combine online prescription processing (PharmaNet) data and hospital data to reduce harmful drug interactions for patients.
Health Enhanced Decision Making	This system will allow ministry staff to securely gather, use, link, access and share large volumes of information to support effective decision making.
Enhanced Audit Confirmation Letters)	This project will allow clinics, hospitals, and other health care institutions to submit responses to audit letters electronically.
Drug Control and Management (Part 2)	This project will improve the privacy and security of patient health information on the province's community pharmacies prescription database.
Health Information Exchange	This project will enhance the secure electronic transmission of healthcare-related data between healthcare providers to improve the cost, quality, safety, and speed of patient care.
BC Major Health Systems Improvements	This project will design and implement standardized, efficient processes and data collection to support decision making and stewardship of physician services funding.
HLTH Mainframe Interfaces Project	This project will move eight critical health interfaces related to benefit payments and subsidized prescriptions from outdated mainframe technology to modern and independent, non- mainframe technology.
Java-Oracle-Glassfish- Struts (JOGS) Security Remediation	This project will fix security flaws in old applications that use Java-Oracle-Glassfish-Struts software.
Special Authority Transformation Project	This project will support the transformation of the Special Authorities program in the Ministry of Health by digitizing internal processes.

Investment Name	Investment Description
HealthNet Infrastructure	This project will upgrade and remediate security vulnerabilities in the system that supports the exchange of electronic health information.
The Ministry of Attorney G	eneral (AG)
Residential Tenancy Branch Continuous Service Improvement Transformation	This project will replace obsolete systems and provide people with convenient, online services.
Court Services Online	This project will provide additional online services to people, reducing the need to apply for services in person.
Court Administration Transformation Suite - Video conference refresh/expansion	This project will upgrade and enhance remote video conferencing equipment to provide better court administration services and may reduce the need for travelling to court.
Court Administration Transformation Suite - Integrated Court Services Scheduling	This project will allow for efficient and streamlined scheduling of court resources, such as sheriffs and court interpreters, as well as increase the types of hearings that people can book online.
Court Administration Transformation Suite Court Fees and Fines	This project will update systems that collect fees and fines.
BC Tribunal Transformation Initiative Onboarding	This project will bring eight government tribunals and two government programs onto a common system to improve efficiency and enhance people's access to dispute resolution services.
Maintenance Enforcement and Locate Service: Family Search	This project introduces a new application that streamlines search requests to find a person's location, assets, employment, and sources of income to facilitate enforcement of support payments involving family court.
Public Guardian and Trustee Document Management	This project sets the foundation to offer new online services in the future.

Investment Name	Investment Description
Comprehensive Disclosure Solution	This project will deliver a complete, end-to-end content management system that will receive, manage, process, and distribute digital evidence and disclosure to all parts of the criminal justice system.
Justice Modernization Initiative	This project, in response to COVID-19, is implementing more digital services, starting with virtualizing some court proceedings such as hearings and online resolution of traffic violation tickets.
Autoplan Care Enhancements (ACE)	This project updated the existing Civil Resolution Tribunal case management system so that all motor vehicle injury claim disputes as of May 1, 2021, will be initiated using an online dispute resolution system.
The Ministry of Public Safe	ty and Solicitor General (PSSG)
Criminal Record Check (CRC) Sharing Capability	This project allows people to securely share their criminal record check with other organizations using their BC Services Card, rather than having to apply each time.
Liquor and Cannabis Licensing System	This project introduced a new system to regulate and licence private cannabis retail stores. The same technology was used to replace an outdated system and paper-based application process for liquor licensing, providing more digital services for the industry.
BC Coroners Service – Investigative System	This project will integrate and optimize information to enhance the investigation of deaths and the identification of death trends and risks to public health and safety.
Victims Services - Enhanced Citizen Service Delivery	This project will support programs that ensure victims of crime and violence are effectively supported in their recovery through timely and accessible services.
Emergency Support Services (ESS) Transformation	In response to the 2017 and 2018 wildfires, this project will develop a system to improve support to evacuees and streamline financial reimbursement to the vendors that supply goods and services in an evacuation. It will also provide improved reporting capacity during emergency events, which will allow for better situation awareness and management of evacuations.

Investment Name	Investment Description
Driver Medical Fitness Transformation	This project will use digital technology to receive medical reports, assess a driver's medical fitness and streamline the requests for drivers, health providers and ICBC.
The Ministry of Labour (LBI	R)
Employment Standards & Temporary Foreign Worker Registry Transformation Initiative	This project will increase accessibility of the services delivered by the Ministry of Labour, including improving supports for vulnerable workers, small business employers and help improve enforcement of minimum standards for wages and working conditions in B.C.
The Ministry of Finance (FII	N)
BC Recovery Benefit Program	This project will add new features to administer and manage the B.C. Recovery Benefit during the pandemic.
BC Emergency Benefit for Workers	This project will add new features to administer and manage the one-time BC Emergency Benefit for Workers during the pandemic.
Homeowner Grant Centralization	This project will centralize the collection of approximately 1.1 million homeowner grant applications from throughout B.C., to ensure consistency in making decisions about applications and to make sure B.C. homeowners receive the grant they are entitled to.
PayBC Enhanced Client Experience and Accelerated Onboarding	This project will modify the existing PayBC application to allow government clients to make payments remotely, using a B.C. Services Card as their ID.
Risk Management Branch (iVOS) Upgrade Project	This project will upgrade the existing risk management system, improving the security and stability of the system as well as providing increased functionality for users.
Revenue Transformation Initiative Phase 4 - Property Tax Deferment	This project will improve the application and decision-making processes, allowing the people of BC quicker access to help paying their property taxes.
Data Analytics and Data Transfer	This project will upgrade data systems to provide improved quality and more consistent reporting and analyses of financial data for business intelligence.

Investment Name	Investment Description
Tobacco & Fuel Tax Exemption Simplification Project	This project will modernize and replace the current paper-based tax exemption process with a new electronic point-of-sale verification and documentation system for tax-exempt sales of tobacco and fuel made on-reserve in B.C.
Revenue Transformation Initiative (RTI) Phase 4, rollout 2 Tax Credits & Forest Audit program	This project will streamline and modernize tax credit and forest audit programs on a single online platform.
Corporate Financial System Mainframe Retirement	This project will include the shutdown of existing mainframe systems and development of new systems on modern platforms including bank reconciliation and payment processing systems.
Provincial Treasury Mainframe Migration	This project will end existing mainframe applications and implement a new treasury management system.
BC PST Rebate on Select Machinery and Equipment	This project will add new capabilities to an existing online platform allowing businesses to apply for a temporary Provincial Sales Tax (PST) rebate to help corporations recover from the financial impacts of the COVID-19 pandemic.
B.C. Increased Employment Incentive	This project will add new capabilities to an existing online platform for a new employment incentive program allowing employers to apply for a one-time refundable tax credit.
Government Communicat	ions & Public Engagement (GCPE)
Today's News Online	This project will address a critical issue with the existing application with plans to do further upgrades in the future.
The Ministry of Transporta	tion (TRAN)
onRouteBC	This project will deliver an online permitting system for commercial drivers to self-permit using a map-based routing tool with turn-by-turn driving instructions, improving safety and efficiency of transportation throughout the province.
DriveBC Input Utility Tool	This project will adapt the existing online traveller information system, DriveBC, to allow for accurate traveller information to be added for the public and for information related to emergencies, traffic conditions, and other travelling information.

Investment Name	Investment Description	
Weather Services	This project will develop a custom weather and avalanche information solution that will increase traveller safety and provide road and weather condition information.	
Integrated Project Services	This project will implement a solution that provides reliable data for the ministry's management of capital projects and portfolios.	
Advanced Camera and Sensor Information System	This project will integrate data from cameras and sensors throughout the province, such as highway and infrastructure images and videos, as well as weather, avalanche and seismic data for managing transportation, infrastructure and public safety.	
Passenger Transportation Modernization	This project will deliver, in support of the ministry ride-hailing initiative, an application capable of supporting a modernized commercial vehicle sector.	
Properties Services Project	This project will deliver a complete, accurate, long-term, sustainable, visual, single-point of access to ministry land and transportation-corridor properties.	
The Ministry of Citizens' Se	The Ministry of Citizens' Services (CITZ)	
Property Inventory Management System (PIMS)	This project will produce an application with better tracking, management, auditing, and access to data to support decision making on property assets.	
Provincial Data & Spatial Services Transfer Initiative	This project will improve existing software that supports mapping on websites so people and businesses can find and use more data in British Columbia.	
Identity Infrastructure	This project will upgrade digital identity services, including IDIR (the BC Public Service's employee directory), Web Access Management and Biometrics, to make them easier to use for B.C.'s Public Service.	
Data Innovation Program Tech Solution	This project will allow the Ministry of Citizens' Services and academic researchers to use multiple data sources to better understand the services British Columbians need.	
Platforms Products and Services	This project will test and evaluate emerging application development approaches, platforms and technologies that government could use to serve B.C. residents better.	

Investment Name	Investment Description
Freedom of Information Enhancement and Modernization	This project will develop new technology that will be used across government to respond to requests for records more efficiently.
Service Desk Appointment Application	This project delivered an application to create appointments online for Service BC in-person services.
Modernize Service BC's Mainframe Revenue Application	This project includes the modernization of six applications to better serve residents of the province.
BCelD	A BCeID account provides secure access to online government services. This project will update the technology being used to improve the service.
BC Services Card	The BC Services Card provides access to government services for residents. This project includes new features to make the card more user friendly.
Business Registration Systems Rewrite	This project will replace aging computer systems that support business registries including Corporate Online, Names Request Online and the OneStop Business Registry
The Ministry of Energy, Mines and Low Carbon Innovation (EMLI)	
Dormant Sites Reclamation	This project will develop an online system to manage projects that clean up unused oil and gas sites.
Mines and Mineral Resources Program Automation and System Integration	This project will bring together data systems on mines and mineral resources, allowing for automated reporting and simplified access to data.
Integrated Petroleum System and EPAY	This project will upgrade the existing data system that manages information on petroleum tenures, rights sales, revenue, and finances.
Mines Digital Services – Major Mines	This project will develop a new system to provide consistent access to open-source data on mining projects and reduce complexity for review staff, mining proponents, Indigenous communities, and the public.

Investment Name	Investment Description
The Ministry of Environme	nt (ENV)
Compliance & Enforcement Harmonization	This project will merge existing applications into a common system to help staff ensure B.C. residents comply with regulations.
Integrated Incident (Spills) Management System	This project will introduce a new system to manage incidents such as spills and to support consistent approaches to how incidents are managed.
Water Program Consolidation	This project will develop a system to combine water data from different sources and publish it to the Water Survey of Canada to improve water management.
Species and Ecosystems Information Systems Modernization Program	This project will develop a system to bring together data about species and ecosystems from 27 different data sources.
BC Parks Open Information Access Project	This project will develop a system to provide information to improve business management, public service, and environmental protection of B.C.'s 14 million hectares of protected areas.
The Ministry of Forests, Laı (FLNRORD)	nds, Natural Resource Operations and Rural Development
Coast Forest Revitalization	This project will upgrade applications to support new waste policies and sampling procedures and to improve waste and residue collection.
Integrated Forestry Projects	This project will create two new applications, Resource Roads and Status and Clearance System Components, based on existing functions within the Forest Tenures Application to replace an aging and out-of-date system.
Forest Operations Map	This project will develop software to share map data on forest operations on a single public site in compliance with new requirements.
Roads Use Permitting Project (RUPP)	This project will expand the new resource roads information system to allow forest licensees to submit road use permit documents online.

Investment Name	Investment Description
Wildfire Management, Prevention and response - Part 2	This project will introduce a single online portal to support the wildfire management system.
The Ministry of Agriculture	, Food and Fisheries (AFF)
Ministry of Agriculture, Food and Fisheries Licensing System	This project will replace several licensing applications with a single system that allows tracing of food recalls, serious incidents, and public health advisories and that helps industry meet food safety standards.
The Ministry of Social Deve	elopment and Poverty Reduction (SDPR)
Employment Assistance Appeal Tribunal	This project will move existing systems to a commercial off-the- shelf tribunal management system.
Prevention and Loss Management System (PLMS) Replacement	This project will replace an existing loss management system with new centralized data systems that will improve reporting and analysis.
Application Modernization Program Debt Management and Sponsorship	This project will modernize debt management, sponsorship, and other systems to improve the issuing of payments to vulnerable people.
The Ministry of Children and Family Development (MCFD)	
Mainframe Ministry of Children and Family Development (MCFD) Resource and Payment System	This project will modernize the current payment system to improve existing processes and prepare for future upgrades.