Overview of TBI Investment Projects

Overall Portfolio: All Projects

Report created on 2020-08-14

The web dashboard can be found at jodiqiao.shinyapps.io/tbi_dashboard.

All Project Codes and Project Names

- 628: Establishment Licensing and Inspections
- A03: Enabling Compliance and Enforcement Program Delivery
- A04: ROEB Aging IT (Stabilization/Modernization/Transformation)
- A05: Drug and Health Product Inspections Database
- A06: Modernizing the ROEB Employee eToolkit
- 701: Border IM/IT Modernization
- 704: Quality Management System
- 705: DAS Modernization
- Cyclops
- Hummingbird
- Kelpie
- IP000: PCP IT Modernization

Overall Project Health Metadata

Project Health is evaluated by three components:

- Deliverability of functional elements
- Budget status
- Schedule

Out of 13 TBI projects with overall status information:

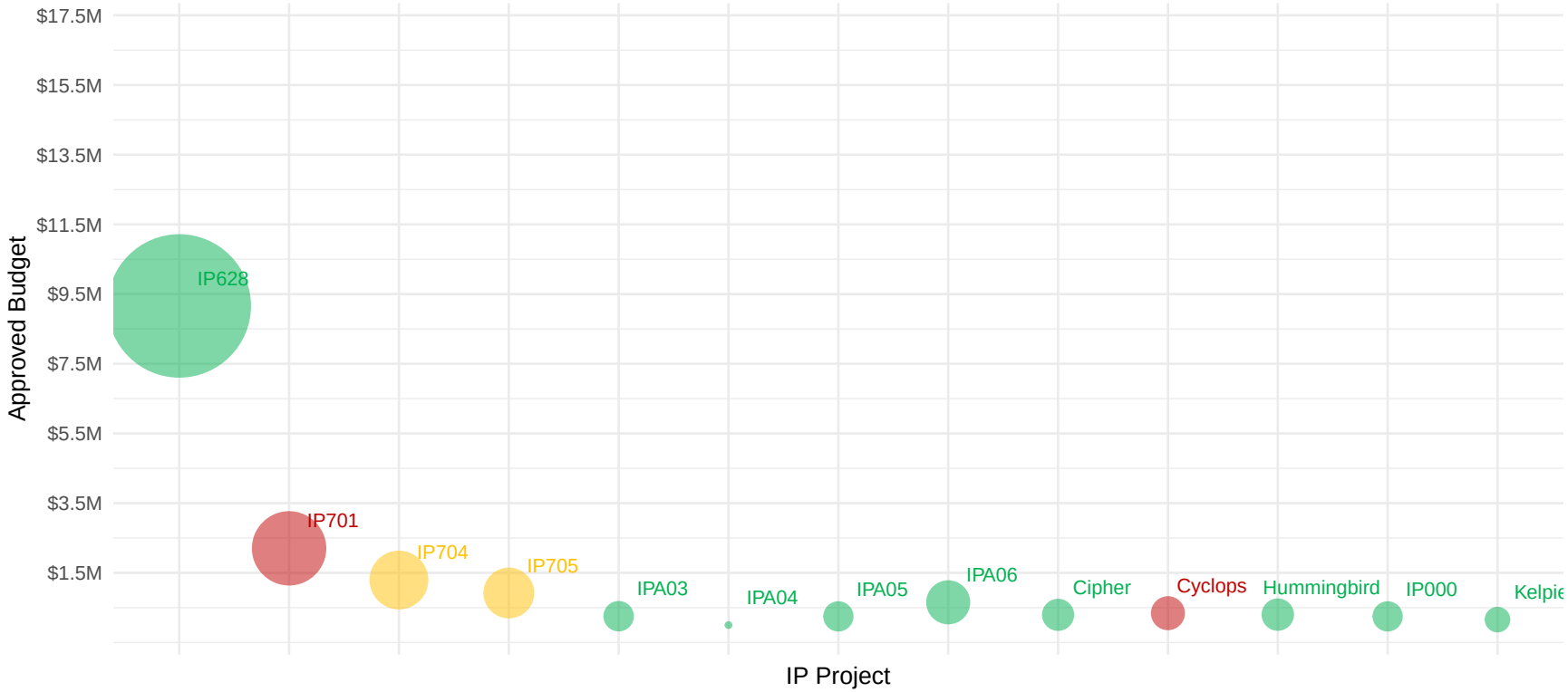
- 2 delayed
- 2 caution
- 9 on-track

Out of 13 TBI projects with overall health information:

- 1 red
- 4 yellow
- 8 green

Overall Project Budget Status

This bubble plot visualizes project budget health. The size of each circular area is relative to the size of the approved budget. The colors of these circles reflect project statuses where Delayed is red, Caution is yellow and On-Track is green.

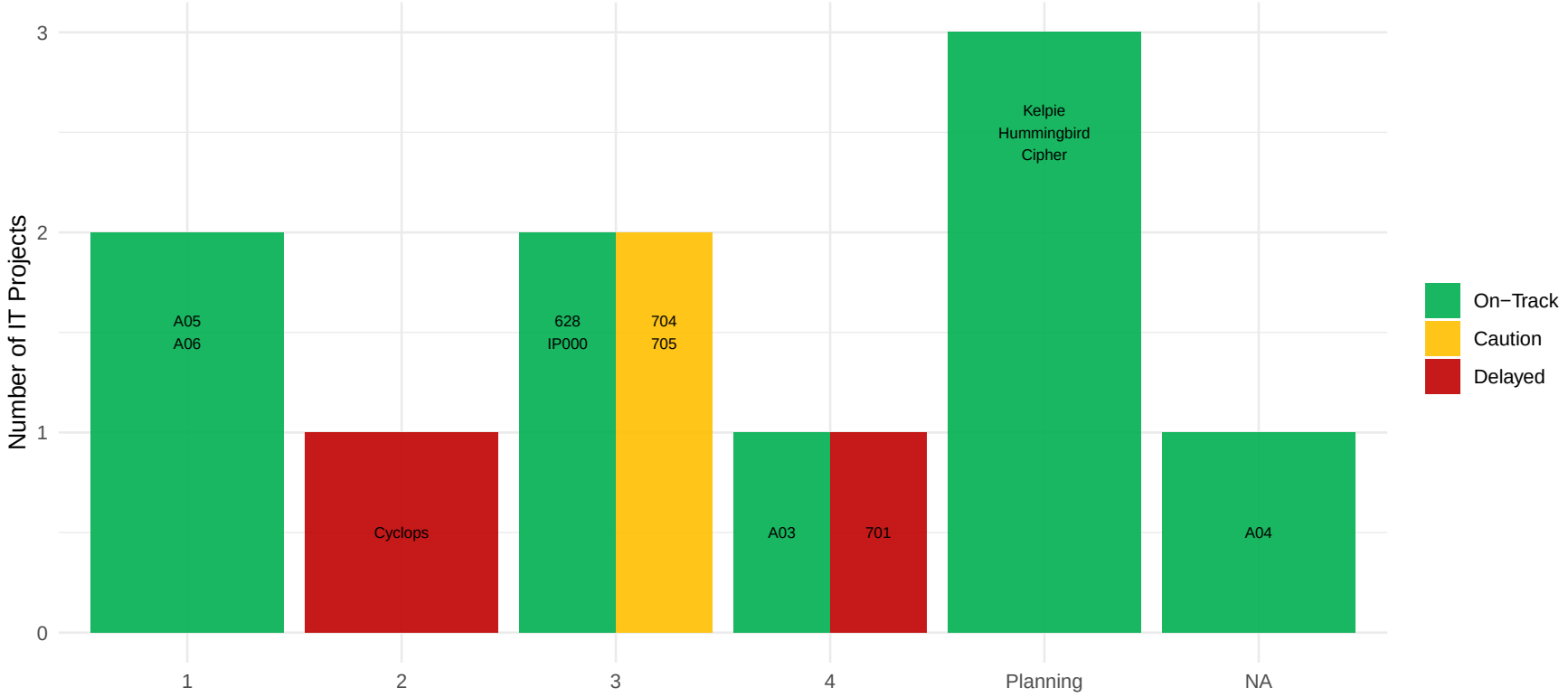


Color code rules:

- Red: Significant course correction may be required. One or more of the intended project outputs may not be achieved. Identified changes may negatively impact the project's scope, cost or schedule and significant course correction may be required.
- Yellow: Some course correction may be required. One or more of the intended project outputs may not be achieved. Identified changes may negatively impact the project's scope, cost or schedule and some course correction may be required.
- Greem: The project is on track. The intended projet outputs are expected to be achieved. Identified changes are not expected to negatively impact the project's scope, cost or schedule.

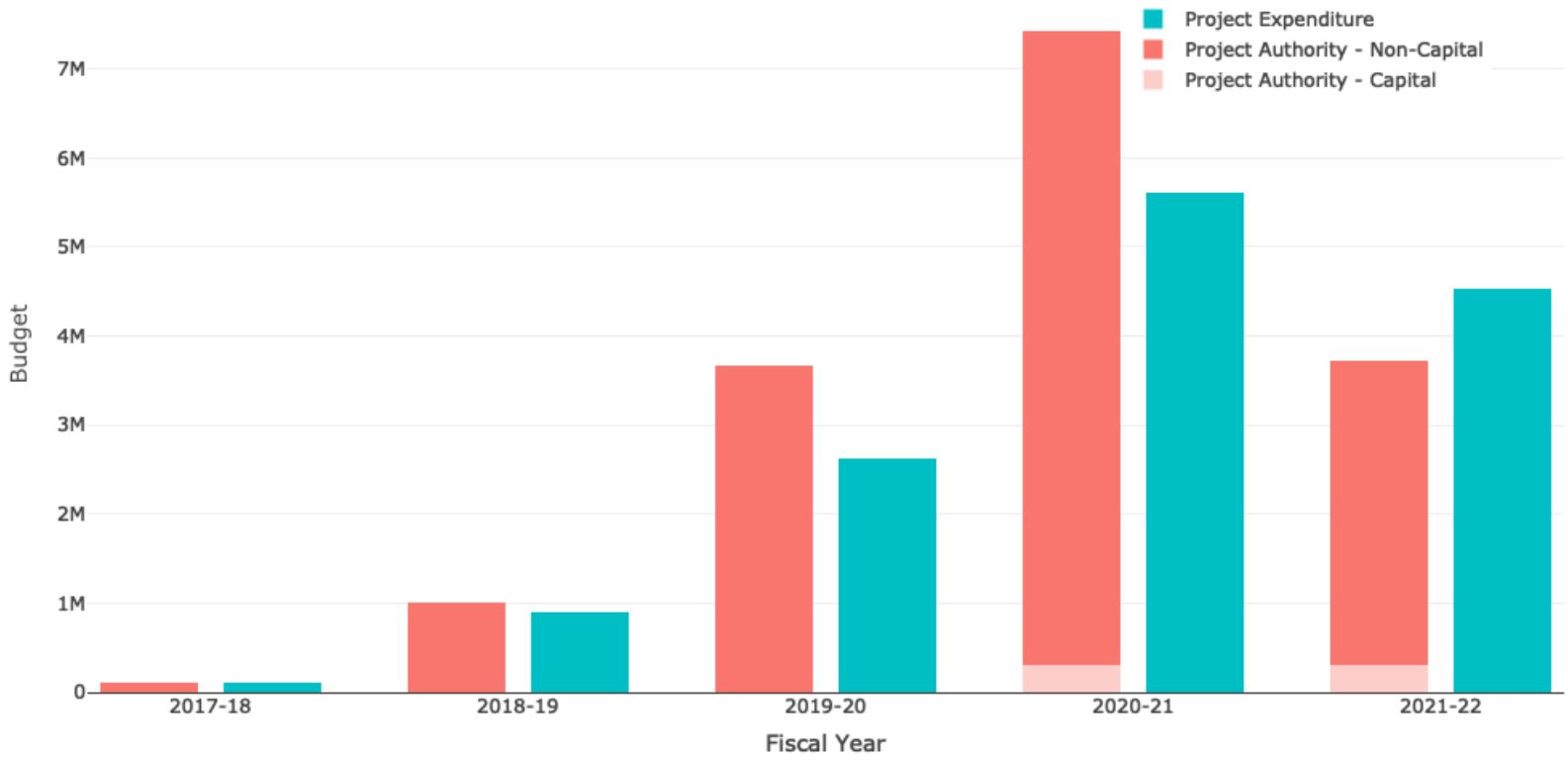
Overall Project Stages & Project Status

This graph visualizes the number of projects with each status of On-Track, Caution or Delayed and the stage the project is in.



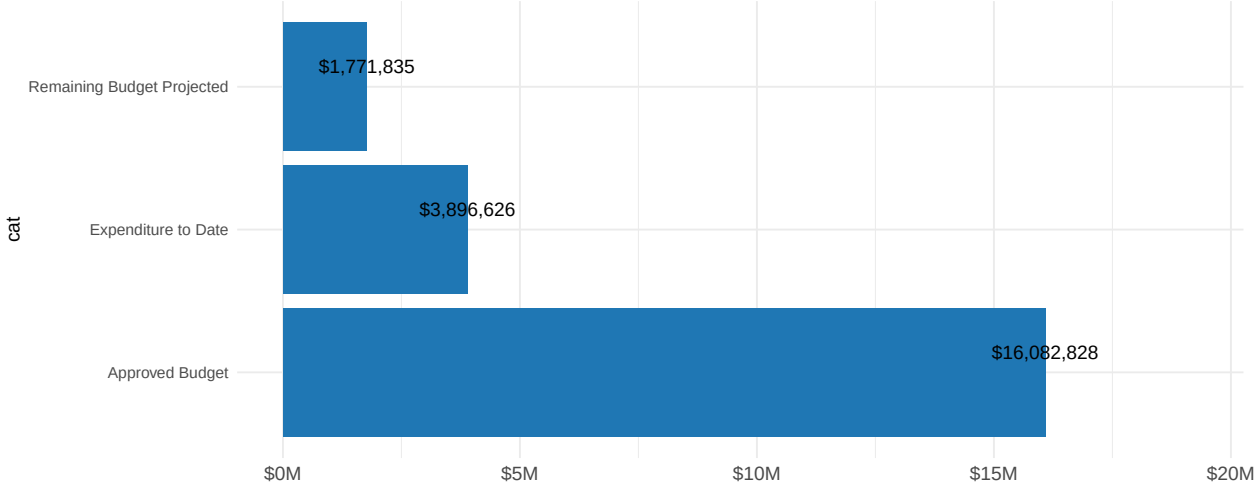
Overall Budget Breakdown by Year

This stacked bar chart shows all project expenditure and authority (capital and non-capital) across all fiscal years with available information.



Overall Budget Projections

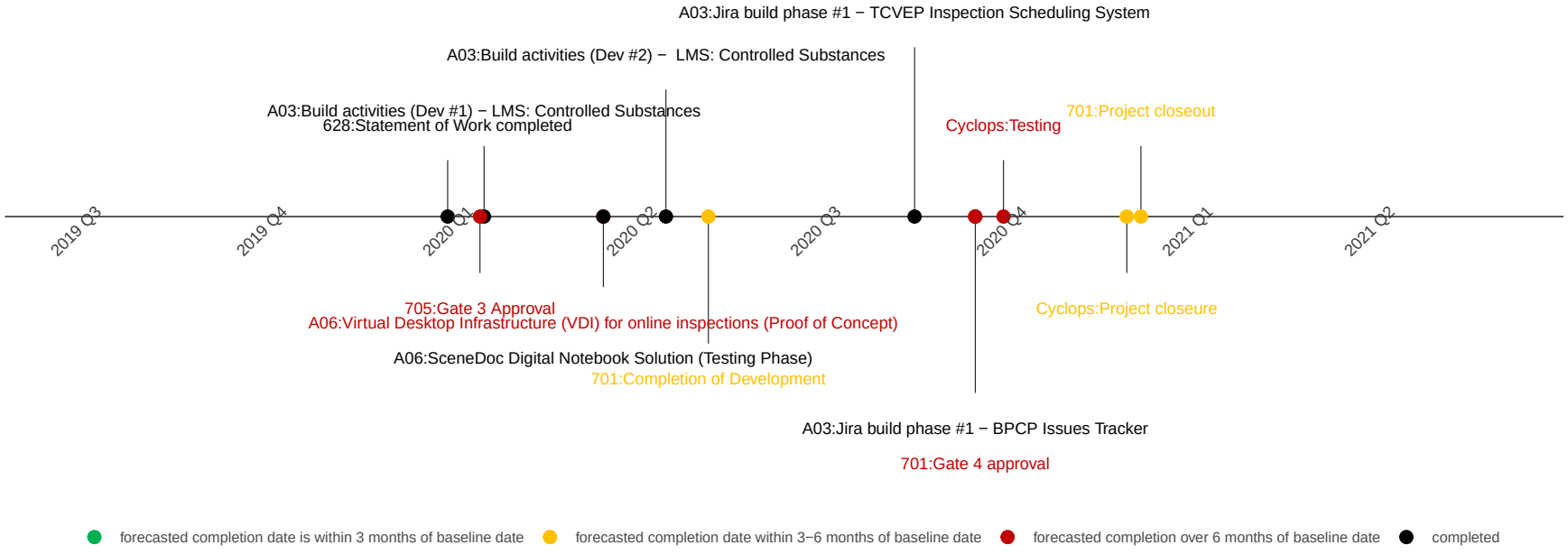
This horizontal bar chart shows all project forecasted expenditures for the ongoing fiscal year, forecasted total expenditures, expenditures to date and approved budget.



Overall Schedule

This timeplot shows all project tasks planned for the ongoing fiscal year, forecasted completion status and fiscal quarter. Completed tasks prior to the current fiscal year is hidden for simplicity. Only all tasks with complete milestone, approved finish date, actual finish date, and schedule health information will appear on the timeplot. If fewer datapoints are visualized than expected, the spreadsheet contains missing information.

- All TBI tasks planned: 64
- Completed tasks: 26
- Incomplete tasks: 38



Overall Budget Breakdown by Year Data Table

Year	year	Authority vs. Expenditures	capital	non_capital	value
2017-18	2017	Project Authority	$0	$106,160	$106,160
2017-18	2017	Project Expenditures	$0	$106,160	$106,160
2018-19	2018	Project Authority	$0	$1,013,705	$1,013,705
2018-19	2018	Project Expenditures	$0	$895,705	$895,705
2019-20	2019	Project Authority	$0	$3,674,906	$3,674,906
2019-20	2019	Project Expenditures	$0	$2,623,308	$2,623,308
2020-21	2020	Project Authority	$300,000	$7,131,757	$7,431,757
2020-21	2020	Project Expenditures	$0	$5,619,087	$5,619,087
2021-22	2021	Project Authority	$300,000	$3,431,300	$3,731,300
2021-22	2021	Project Expenditures	$0	$4,528,955	$4,528,955

List of All Project Descriptions

628: Establishment Licensing and Inspections Descriptions There are a number of different post-market programs at Health Canada that authorize applicants to conduct regulated activities, against regulated products, at specific locations. These include: • Medical Device Establishment Licensing (ROEB) • Natural Health Product Site Licensing (HPFB) • Controlled Substances Dealer Licensing (HECSB) • Drug Establishment Licensing (ROEB)

There are two active IP projects (CSPS and e-CES) that include this functionality. It is also expected that the Cannabis legalization program will require this functionality.

Most programs in this space are using systems with growing aging IT risks, or are still having to use paper and spreadsheet based processes.

Intended direction is to identify and acquire a highly configurable COTS product that is targeted at the regulatory licensing space. This solution will be available to all programs as their primary option for this capability.

Functionality that is within scope of solution is: • application intake, review, and triage • inspections that support licence decisions • risk assessment • decision workflow • license/permit generation and notification • calculation & collection of license fees (cost recovery)

A03: Enabling Compliance and Enforcement Program Delivery Descriptions To enable ROEB to better support enhanced efficiency and effectiveness in Compliance and Enforcement program delivery investments will be made in learning management, inspection scheduling, assisted human reproduction, fleet, client service tools, and Infrastructure and Software as a Service.

A04: ROEB Aging IT (Stabilization/Modernization/Transformation) Descriptions There are 28 ROEB IT solutions that are considered Aging IT. Systems will be addressed by priority and grouped with projects of similar priority.

There are 28 ROEB IT solutions that are considered aging IT. ROEB will conduct a review of aging IT systems and produce a plan to remediate through tolerating, migrating, innovating, or eliminating these systems. High priority systems under aging IT include: Inspection Reporting System, Incident System, Export Certificate Database, and the Laboratory Information Management System.

A05: Drug and Health Product Inspections Database Descriptions As part of the regulatory transparency priority, seven different programs make use of the online Inspection Database to post their inspection reports to the Healthy Canadians website, where the public has access to them. Due to the challenges experienced when making changes to DHPID, the system will be rewritten in order to make future enhancements easier to manage and less resource intensive.

A06: Modernizing the ROEB Employee eToolkit Descriptions This project focuses on providing off-the-shelf hardware and software solutions to employees working in the ROEB program to modernize the workforce and enable a seamless transition from office to the field. It addresses challenges in the technology currently made available to ROEB employees and proposes alternative solutions that would allow them to do their jobs more efficiently.

701: Border IM/IT Modernization Descriptions Invest in a modern IM/IT system for the Health Products Border Program to bring their data collection and management processes onto a single mobile platform, with the following key features: • Workload management • Process standardization • Data quality and structure • Enterprise collaboration • Reporting This IT system will replace two Lotus Notes databases

and numerous Excel spreadsheets being used by the health products border program. This initiative is closely linked with Business Analysis/Risk Intelligence initiatives outlined above.

704: Quality Management System Descriptions System for Quality Management (ISO 9001:2000): is part of a suite of databases designed specifically to meet the requirements of ISO 9001:2000, the QSI System for Quality Management helps an organization reap the benefits of ISO certification, including improved customer satisfaction and reduced costs. QSi, the software suite used to manage a Quality Management System (QMS) is currently unsupported and is housed on an Aging IT Platform (Lotus Notes). The software suite is inherently unstable and contains many bugs. The ROEB programs using QSi (Labs, HPCD, MDCCD) are concerned of a system collapse and how it could potentially impact current Accreditation and Mutual Recognition Agreements in place.

705: DAS Modernization Descriptions Modernization of the DAS Labs business proecess and introduction of an end-to-end IT solution for the submission, triage, assessment, and issuance of the DAS Certificate of Analysis.

Cyclops Descriptions The project is proposing to create a new process enabled by a digital-tool (smartphone camera / wearable device) to virtualize optically represented text on the label, query the data via existing databases, identify and highlight instances of non-compliances, and visually depict the issue by overlaying the information back on to the camera/device feed. This will allow Inspectors to review the labels on-site, without the need to collect samples and invest more time into the inspection.

As a small scale proof of concept, a solution can be developed using the minimal viable product model for Natural Health Products and targeted for Inspectors in the Health Product Compliance and the Border Integrity Unit for testing.

Hummingbird Descriptions Using Unmanned Aerial Systems (UAS) create a new outdoor inspection system to positively impact the operational activities of inspectors. Initial focus is to achieve benefit to inspectors within Cannabis, Controlled Substances (Opium Poppy), and Pesticide programs. The major goals of the project include: • Identify, address and fill the gaps within the current limitations in the field. • Provide inspectors with more accurate and modernized tools. • Ensure better safety for inspectors. • Utilize the vast data collected through Unmanned Aerial Vehicles (UAV) to aid inspectors in real time inspections as well as help Health Canada better understand non-compliance patterns and loopholes.

Cipher Descriptions This project will serve as a vehicle for Health Canada to explore and experiment with text mining, natural language processing, machine learning and artificial intelligence to mine inspection reports for insight and actionable information that would support prospective and predictive analysis.

Kelpie Descriptions This project will initially explore whether it's possible to use artificial intelligence to monitor social media and identify "posts" promoting vaping products that could be appealing to youth. While the initial focus is to acheive benefit for the Tobacco and Vaping C&E program, what we learn will also benefit other HC programs.

IP000: PCP IT Modernization Descriptions This project aims to bring together all pesticide compliance and enforcement information into one IT system and provide a platform for managing workload, standardizing processes and reporting on performance.