

Evaluation of the RCMP's Biology Casework Analysis Services

Final Report



Aussi disponible en français sous le titre : Évaluation des services d'analyses biologiques de la GRC

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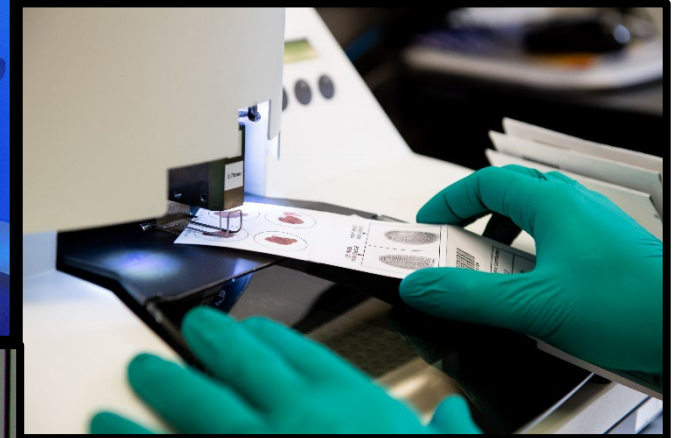
Catalogue Number: PS64-264/2026E-PDF
ISBN: 978-0-660-97765-2

Table of Contents

	Slide #
Acronyms	3
Executive Summary	4
Evaluation Approach	5-8
Program Context	9-11
Key Findings	12-23
Conclusions	24
Recommendations	25
Appendices	26-29

Acronyms

BCA	Biology Casework Analysis
BCAA	Biology Casework Analysis Agreement
BSP	Biology Services Program
FAC	Forensic Assessment Center
IGG	Investigative Genetic Genealogy
LARS	Leave Activities Reporting System
LIMS	Laboratory Information Management System
NFLS	National Forensic Laboratory Services
PS	Public Safety Canada
P/Ts	Provinces and Territories
RCCC	Regional Client Consultation Committee
RCMP	Royal Canadian Mounted Police



Executive summary

Context

The Royal Canadian Mounted Police (RCMP) National Forensic Laboratory Services (NFLS) operates a single public laboratory system with three sites located in Surrey, Edmonton and Ottawa. NFLS provides biology casework analysis (BCA) through its Biology Services Program (BSP) that includes biological evidence recovery, DNA analysis, and reporting services in relation to a wide range of criminal code offences. These offences are organized into four categories: crime against property; crime against persons; sexual assault; and homicide.

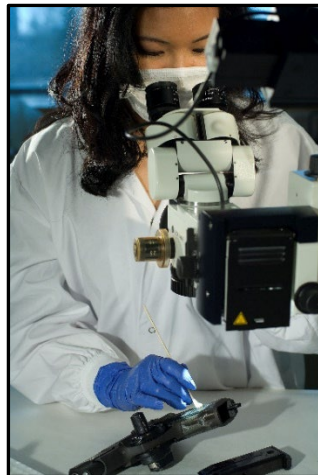
In 2014, the Government of Canada and the RCMP entered into cost-sharing Biology Casework Analysis Agreements (BCAAs) with all provinces and territories (P/Ts) other than Ontario and Quebec. The purpose of the agreements was to "undertake all biology casework analysis of physical evidence that may contain biological material collected as part of criminal investigations" for the police of jurisdiction and investigating agencies to be of potential probative value to criminal investigations.

Evaluation Objective and Scope

The objective of the evaluation was to examine, in accordance with the Treasury Board Policy on Results, the effectiveness and efficiency of the RCMP's BCA delivered by the BSP. The requirement to evaluate this program is outlined in the BCAAs. The program was last evaluated in 2017. This evaluation is national in scope, and RCMP laboratory personnel and external stakeholders were engaged during the conduct phase.

The evaluation focused on 3 questions:

1. Are BCA services achieving the expected results of the BCAAs?
2. How effectively are BCA services meeting client needs?
3. To what extent are BCA services and the BCAAs designed and structured to promote long-term sustainability?



Key Takeaways

The BCAAs have provided an adequate general funding framework for the delivery of BCA services. However, evidence indicates that there are several challenges that should be considered to improve the agreements, as well as a need to review service standards and capacity.

Although priority service requests are being delivered in a timely manner to support investigations of serious crime, threats to public safety, and critical incidents, timeliness of routine service requests is not fully meeting client/stakeholder needs. The BSP has not been able to meet its internal service standards for routine services, and it is not clear these standards will be met moving forward.

The BSP has continually reviewed and revised its processes and systems to improve program delivery and to streamline operations. While there have been some gains in efficiency, challenges related to timeliness persist.

While data systems and performance measures exist, there are insufficient performance metrics to tell the story of program capacity. The RCMP lab is data rich and has operational systems which are well designed to support operations and generally meet BCAA reporting requirements. However, the current performance metrics may not be sufficient to fully tell the performance story of the program to support decision-making.

The evaluation found that the BSP is at risk of not being able to ensure long-term sustainability. This is due to challenges related to human resource levels, staff turnover, recruitment and retention, evergreening of dated technologies and equipment, and evergreening of existing infrastructure.

In addition, a consistent approach to communication both within the BSP and with clients and stakeholders is needed to better support operations and manage expectations.

Approach



Objective and Scope



The objective of the evaluation was to examine, in accordance with the Treasury Board Policy on Results, the effectiveness and efficiency of the RCMP's biology casework analysis (BCA) services. The need for this evaluation was stipulated in the Biology Casework Analysis Agreements (BCAAs) signed with 11 provinces and territories (P/Ts) in 2014. This program was previously evaluated in 2017.

The evaluation was national in scope, and RCMP laboratory personnel and external stakeholders were engaged during the conduct phase.

The evaluation focused on three questions:

1. Are BCA services achieving the expected results of the BCAAs?
2. How effectively are BCA services meeting client needs?
3. To what extent are BCA services and the BCAAs designed and structured to promote long-term sustainability?

Data sources

Interviews: 44	Program and Financial Data Analysis	Document Review: More than 1,000 documents
Individual and group interviews were conducted in-person and virtually with: ▪ BSP senior management (3) ▪ BSP personnel (13) ▪ P/T representatives (5) ▪ Client investigators/service users (21) ▪ Comparator (Ontario and Quebec) laboratory managers (2) * A total of 44 interviews with 97 individuals were included as part of the evaluation analysis. Some follow-up sessions were held with interviewees.	Available RCMP administrative and financial data were collected and analyzed: ▪ Performance data from the Laboratory Information Management System (LIMS) and the Leave Activities Reporting System (LARS) ▪ Financial data * Data analyzed for this evaluation represent snapshots in time, as the LIMS and LARS systems are continually evolving as BCA services are received and delivered. As such, there are some figures associated with completions of service requests that may not fully align.	Internal documentation was reviewed, such as: ▪ Internal reports ▪ Foundational documents (e.g. Standard Operating Procedures) ▪ Meeting minutes and records of decision ▪ Annual reports ▪ Reviews and assessments ▪ Presentations and briefings
Site Visits/Observations: 3	Survey of BCA Clients: 44	Comparative Analysis: 3 Forensic Labs
The evaluation team visited the three RCMP laboratories in Ottawa, Edmonton and Surrey. During the site visits, the evaluation team: ▪ Toured the facilities – reviewing facilities and equipment ▪ Observed lab staff performing their duties ▪ Interviewed staff, client stakeholders, and P/T representatives	An online client satisfaction survey was conducted in June 2025 with clients across Canada (police investigators / staff who have requested BCA services over the past three fiscal years) to gather insights about the effectiveness, efficiency, and satisfaction with the service received. ▪ Of the total 750 surveys sent out, 75 came back as undeliverable, and only 69 clients opened the survey through the link provided. ▪ While 44 started the survey, only 42 used BCA services and completed the survey – for an overall response rate of 5.6% and a valid response rate of 60.8%.	A comparative analysis of labs in Canada that provide BCA services (i.e. RCMP, Quebec’s Laboratoire de sciences judiciaires et de médecine légale and Ontario’s Centre of Forensic Sciences) was conducted. Areas examined include: ▪ Governance structures ▪ Delivery and operational models ▪ Administrative and operational support ▪ Performance ▪ Adaptation to new technology ▪ Communication with clients and stakeholders ▪ Expenditures

Limitations

Limitation	Mitigation
Low survey response rate	
- Participation was voluntary and may have been influenced by respondents' shift and leave schedules. - Due to time constraints, survey administration was limited to 21 days. - There may have been survey fatigue among BSP clients.	- BSP managers sent an introductory email to the client survey sample prior to the survey launch. - A reminder email was sent to notify potential respondents of the limited survey administration period. - The survey was left open for as long as possible to ensure ample time for respondents.
Availability of data	
- Overall, the program offers a wealth of data supported by high-level metrics. However, specific program activities and outputs were not easily accessible for analysis. - This eliminated the feasibility of completing meaningful case studies for this evaluation. - Information/data associated with BCA-related intake activities of the Forensic Assessment Centre (FAC) were not available, which limited analysis of interaction time between clients and the BSP.	- Efforts were made to collect all relevant data, and other lines of evidence were used to triangulate the data. - While it was determined case studies were not feasible, consultations resulted in alternative data requests. - FAC staff were included in interviews and discussions during the Ottawa laboratory site visit to collect information on challenges and issues.
Limited perspective from certain client groups	
The evaluation team was not able to collect perspectives from all client groups due to the large number of clients and limited time available.	- The survey was used to supplement the client perspective. - Purposeful / targeting sampling was used for interviews and survey sampling.

Context



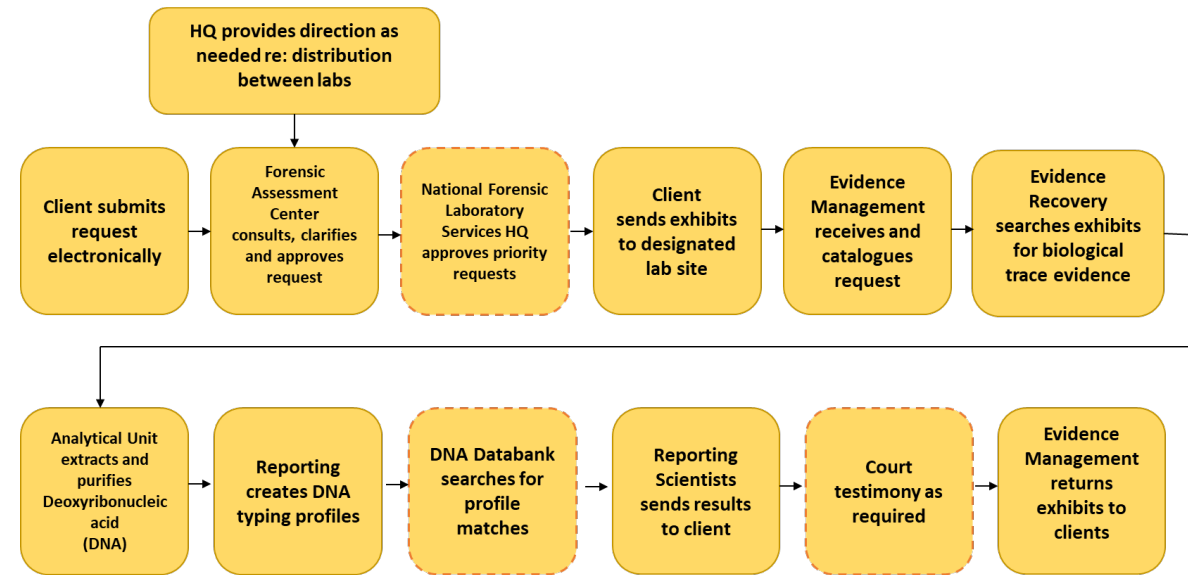
Program overview

The RCMP is the main provider of forensic analysis for police agencies and courts across Canada, with the exception of those in Ontario and Quebec. NFLS operates a single laboratory system with three sites located in Surrey, Edmonton and Ottawa. The NFLS BSP provides biological evidence recovery, DNA analysis, and reporting services in relation to a wide range of criminal code offences. BCA service requests are divided and analyzed under four categories: homicide, sexual assault, crime against property, and crime against persons.

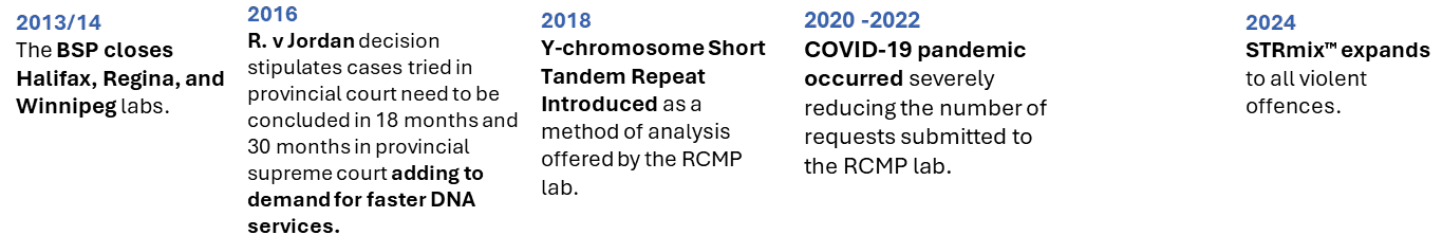
In 2014, the Government of Canada and the RCMP renewed the cost-sharing BCAAs with 11 P/Ts (excluding Ontario and Quebec) to undertake all BCA of physical evidence that may contain biological material collected as part of a criminal investigation for the police of jurisdiction and investigating agencies. These 10-year agreements expired in 2024, and negotiations for their renewal are ongoing.

The previous BCA evaluation resulted in two recommendations: 1) Review the 40-day service standard in collaboration with clients to establish a service standard that yields achievable diary dates; and 2) Review and revise existing communication materials as required to meet the needs of police services and prosecutors. As a result, the current service standard for routine service requests was changed to 65 calendar days, 80% of the time with a 9,500-file caseload. Note that this standard was based on 8,500 files addressed by the BSP and 1,000 contracted to a private lab, Mérieux NutriSciences (formerly Bureau Veritas). However, the use of Bureau Veritas for new cases ended in 2023/24, and the BSP now has responsibility for the entire 9,500-file caseload.

BCA Process Map from Intake to Release of Evidence



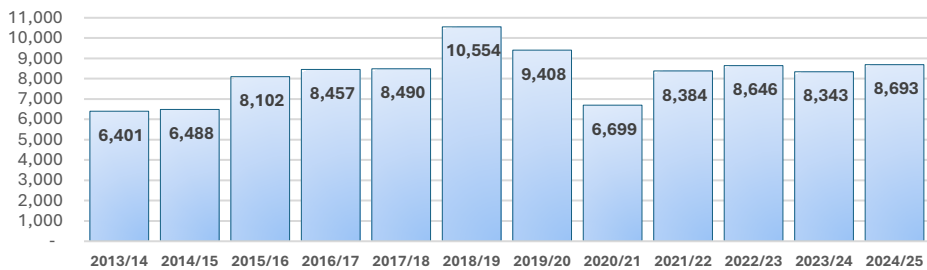
Timeline of Key Milestones for BSP



Note: STRmix™ is software that improves the method for probabilistic genotyping and allows for improved analysis of complex DNA mixtures that were not previously suitable for comparison.

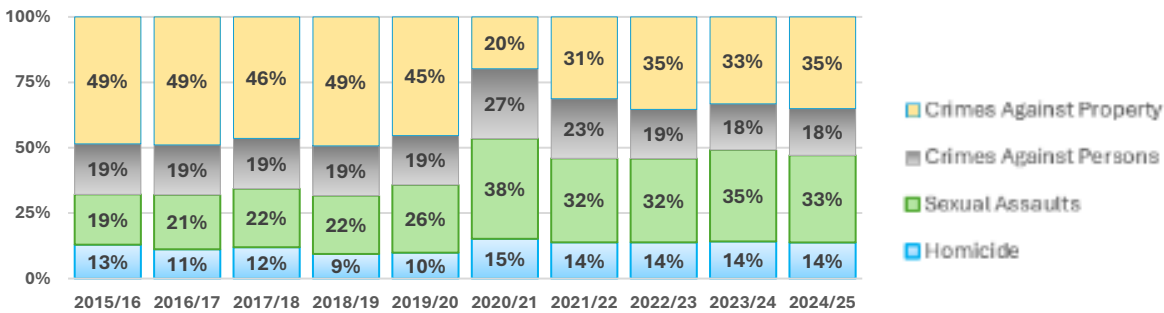
Characteristics of BCA services

Total service requests for BCA services: 2013/14 to 2024/25



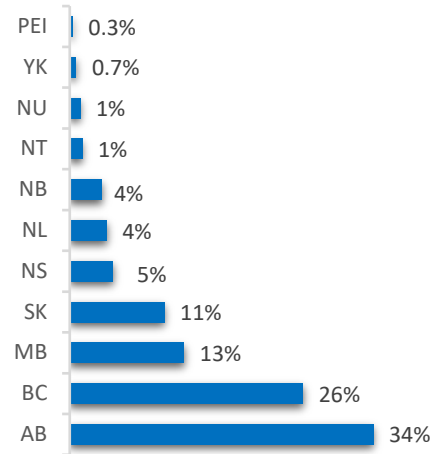
- Over the past 12 years, the number of BCA service requests increased steadily, peaking in 2018/19 before declining sharply in 2020/21 due to the COVID-19 pandemic.
- In 2020/21, NFLS temporarily limited request intake to violent crimes to preserve globally scarce consumables and comply with pandemic restrictions.
- Since 2021/22, BCA service requests have remained relatively stable.

Proportion of BCA service requests by offence stream: 2015/16 to 2024/25



- The majority of completed BCA service requests supported investigations of property crime and sexual assault.
- The proportion of BCA service requests completed to support homicide investigations has been relatively consistent over the past five years.

Total BCA service requests by province



- Over the past five years, Alberta and British Columbia were the most frequent users of BCA services, accounting for 60% of all requests.
- In these provinces, municipal police agencies tend to submit the highest volumes of BCA requests for service.

Average turnaround time by offence stream: 2019/20 to 2024/25

Stream	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
A - Homicide	90	98	77	88	85	77
B - Sexual Assaults	72	79	68	78	86	73
C - Crimes Against Person	60	60	56	72	84	76
D - Crimes Against Property	55	62	54	64	84	65

- Over the past six fiscal years, average turnaround time for BCA service requests supporting homicide investigations were well over the 65-calendar day service standard – as were files supporting sexual assault investigations.

Difference Between Avg TAT and Service Standard (SS)	
Met or Under SS	
1 – 10 days Over SS	
11 – 20 days Over SS	
21+ days over SS	

Key Findings





FINDING #1

The Biology Casework Analysis Agreements have provided an adequate general funding framework for the delivery of biology casework analysis services.

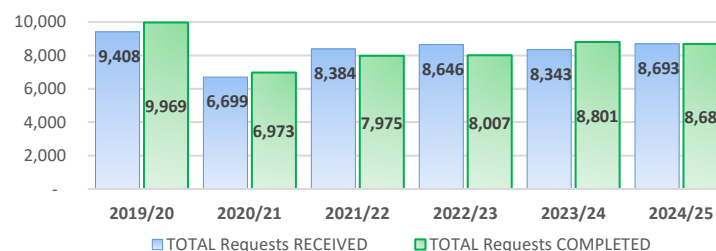
The current BCAAs provide the general funding framework required for the RCMP laboratories to deliver BCA services to clients and stakeholders.

The BCAAs outline the cost-sharing model, scope of services, governance, and audit/evaluation.

The 2014-2024 BCAAs stipulate that the federal government will cover 46% of the total costs, while the remaining 54% is to be distributed among jurisdictions based on their proportional usage.

Interviews, data and document analysis suggest that these agreements have ensured access to high-quality forensic services through the RCMP lab and support the submission of DNA profiles to the National DNA Data Bank.

Total Service Requests Received and Completed by Fiscal Year



Over the past five years, program data shows the BSP has received an average of 8,362 service requests per year and has completed an average of 8,401. The difference reflects service requests received in one fiscal year but completed in the next.

The number of service requests received and completed declined sharply in 2020/21 due to limited operations during the COVID-19 pandemic.

Since the return to full service in 2021/22, service requests have continued to increase – nearing pre-pandemic levels in 2024/25.

Interviews and survey data show that clients and stakeholders expect that their needs for BCA services will increase in the years to come.

There are several issues and challenges that should be considered to improve the BCAAs moving forward.

Interviewees outlined general issues related to the content of past agreements, including:

- Wording is generic and too vague;
- Timeliness of service provision (e.g. service standards) is not referenced;
- Types of service provision and acquisition of emerging technologies is not referenced;
- The levels and types of RCMP communications and outreach are not adequately addressed;
- There are no accountability mechanisms for not meeting service standards; and
- The breakdown of costing arrangements for each P/T needs to be clarified.

FINDING #1 (continued)

Interviewees outlined other issues with the BCAAs that impact service provision.

The BCAAs do not support timely adoption of emerging technology
 Many interviewees (internal and external) reported that the RCMP labs are not keeping up with emerging technology. Lab management and staff indicated that the RCMP lab’s implementation of new technology lags about five years behind other labs due to a variety of factors.

The RCMP lab does not offer all BCA services desired
 Some clients and stakeholders reported that the RCMP lab does not offer all the BCA services they would like (e.g. Rapid DNA, Investigative Genetic Genealogy (IGG)). As a result, some are using private labs.

The BCAAs do not support forecasting for technology acquisition
 Some P/T representatives indicated that costing and forecasting for acquisition of new, emerging technology needs to be more clearly outlined in the BCAAs.

The latest 10-year agreement expired in March 2024 and there are challenges in renegotiating the next set of BCAAs.

Although discussions on the development of new agreements started before the expiry date, not all P/Ts have been engaged in the renegotiation process nor signed off on a one-year extension to support renegotiation.

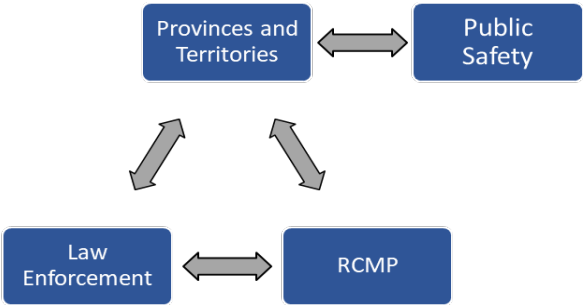
Although select P/T representatives are taking the lead in consultations with Public Safety Canada (PS) and the RCMP negotiations have not progressed on schedule due to several factors, including insufficient PS resources to manage negotiations, lack of willingness to revise terms, and concerns with the costing model, transparency and accountability.

Interviewees reported that an inherent challenge with the BCAAs is that the templates may not align well with the diversity of needs and expectations of individual P/Ts. It was also reported that a rotation of P/T representatives in negotiation roles can be a challenge.

Efficient and effective renegotiation and management of the BCAAs requires the regular sharing of current and accurate information.

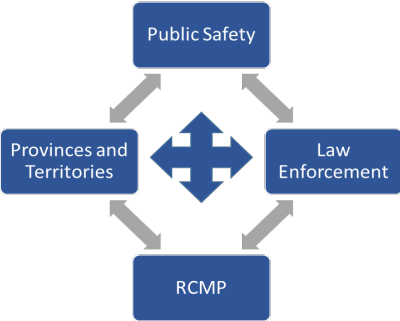
The perspectives of the BCAA signatories (i.e. P/Ts and PS) are not always aligned with, or informed by, the realities of clients/stakeholders and the BCA service provider (i.e. RCMP lab). As such, it is imperative that those aspects of BCA services that are working well and those in need of improvement are communicated to all parties.

Perceived Structure of Interactions



Some interviewees reported that more regular outreach and communication from the RCMP would facilitate greater understanding of key issues as they occur.

Suggested Structure of Interactions



Why it matters

A clear, detailed agreement that meets the needs of all stakeholders is the foundation for quality service provision. Although the current BCAAs seem adequate overall, they may not be meeting the needs of all clients and stakeholders and may negatively impact timely service delivery.



FINDING #2

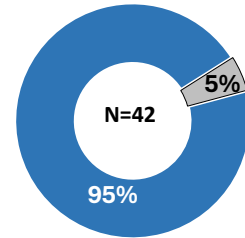
BCA services were valued by clients. However, service standards were not consistently met, and concerns were raised about the timely delivery of routine services.

Virtually all clients and stakeholders reported that the BSP has provided them with high quality analysis, reports and testimony to support investigations and prosecutions.

Client and stakeholder groups reported the RCMP lab provides critical services and support for investigations and court activities. BCA work is highly valued. Reports are fulsome and clearly show the chain of custody for evidence. Additionally, testimony for court activities is widely respected by judges, crown prosecutors, defence attorneys, and juries.

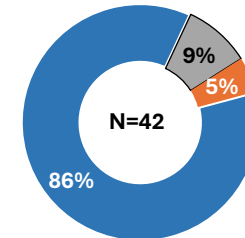
Client Satisfaction

The majority of interviewees and survey respondents were satisfied with the quality of BCA services provided over the past five years.



95% of surveyed clients reported they were satisfied/ very satisfied with the quality of BCA services.

- Satisfied/Very Satisfied
- Neutral
- Dissatisfied/Very Dissatisfied

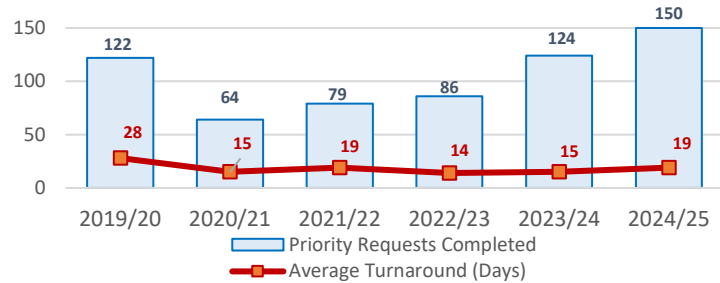


86% of surveyed clients reported they were satisfied/ very satisfied with BCA services overall.

Priority service requests

Priority service requests are being delivered in a timely manner to support investigations of serious crime, threats to public safety, and critical incidents.

The volume of priority service requests increased an average of 22 requests per year over the past five years.



- Information from the previous evaluation shows that the BSP has been largely meeting their priority service request diary dates since 2011/12.

2020/21	2021/22	2022/23	2023/24	2024/25
98%	96%	97%	97%	97%
2011/12	2012/13	2013/14	2014/15	2015/16
91%	84%	94%	92%	97%

- There is some indication that the consistent delivery of priority service requests may impact the delivery of routine requests, since priority files move to the front of service queues.

The RCMP's protocols for expedited services appear to align with the processes used by Quebec's Laboratoire de sciences judiciaires et de médecine légale and Ontario's Centre of Forensic Sciences.

Timeliness of routine service requests is not fully meeting client / stakeholder needs.

In contrast to priority service requests, interview and survey data suggests that most clients found routine services were not being delivered in a timely manner. Only 50% of surveyed clients were satisfied or very satisfied with the timeliness of BCA services. The key area for improvement was timeliness. Of those asked, 66% indicated that the RCMP lab should have a quicker turnaround time.

Unlike the negotiated turnaround times for priority service requests, the RCMP lab has an internal service standard for routine requests of 65 calendar days 80% of the time, with a caseload of 9,500 files.

Clients are using private labs for quicker service request turnaround time.

Interview data shows some clients are paying higher service rates (not covered by the BCAAs) to private labs for quicker turnaround times to meet charge approval deadlines. Despite the higher costs of private labs, it is more cost-effective for these clients to use their services rather than incur the costs associated with the surveillance of suspects (e.g. overtime).

BSP limits on the number/intake of exhibits for cases with a lot of exhibits, and technology not offered by the RCMP lab (e.g. Rapid DNA, IGG) were other noted reasons for using private labs.

Additionally, some high-volume clients reported using internal processes to risk manage certain BCA requests. For example, exhibits/samples may be sent to private labs if a suspect is known, there is risk to public safety, and DNA thresholds are below BSP standards.

Note: The frequency and cost of private lab use by some police services, as well as any noted impacts due to service delays for casework analyzed by the RCMP lab, could not be validated. Although requested, no information was shared to substantiate costs or impacts.

The BSP has not been able to meet its internal service standards for routine service requests for some time.

As noted in the previous evaluation (2017), the BSP’s inability to meet its service standards has been an ongoing issue. From 2011/12 to 2015/16, only 42% to 54% of routine service requests met the previous target of 40 days. Based on a recommendation in the 2017 evaluation, the service standard was revised to 65 days.

In this evaluation period, the program has never met this revised service standard for routine cases. Overall, service delivery for all P/Ts combined has been well below the service standard.

Percentage of routine service requests meeting service standard (2019/20 to 2024/25)

P/T	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Service Standard	65 Calendar days (80% of the time)					
Canada Average	53%	50%	61%	56%	37%	44%
AB	57%	58%	73%	71%	46%	57%
BC	51%	50%	61%	41%	27%	34%
MB	48%	40%	47%	46%	33%	40%
NB	44%	43%	48%	49%	31%	43%
NL	48%	45%	57%	46%	40%	50%
NS	48%	43%	48%	48%	38%	38%
NT	39%	58%	59%	58%	40%	44%
NU	33%	31%	23%	41%	35%	41%
PEI	57%	31%	38%	38%	41%	41%
SK	55%	49%	57%	68%	36%	41%
YK	42%	45%	56%	25%	22%	29%
P/Ts below Avg	8/11	8/11	9/11	8/11	7/11	8/11

% Difference	
-1 to -9%	
-10 to -15%	
-16 to -25%	
-26 to -35%	
-36 to -45%	
-46%+	

Clients acknowledge that producing BCA evidence suitable for court proceedings requires time. In fact, many noted they would be satisfied if the current service standard was met—an expectation that has yet to be achieved.

Comparing the delivery rates of routine service requests, the proportion of the RCMP lab’s cases that met the service standard in 2024/25 was similar to the rates of the Ontario lab (57% for the litigative phase), but far below the Quebec lab (87% for all service requests).

Why it matters

A lack of timely service for routine service requests can impact investigations, erode client confidence in the RCMP lab, and impact BCAA negotiations.

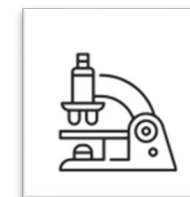
FINDING #3

The BSP has continually reviewed and revised its processes and systems to improve program delivery and to streamline operations. While there have been some gains in efficiency, challenges related to timeliness and service delivery persist.



Program documentation and interviews clearly indicate that the BSP is collecting information and conducting internal and external reviews to enhance the efficiency and effectiveness of BCA processes.

- The BSP has implemented systems (e.g. LIMS, LARS) to log and track the processing of requests for BCA services from FAC approval through to analysis and reporting. This data supports ongoing reviews of resources, level of effort across activities, and outputs. Reviews of internal processes and procedures, workflows, and client needs have led to several efficiencies, such as:
 - Initiatives to update laboratory systems and modernize workflows have included updates to LIMS using modern information management principles and expanding partnerships, thus reducing internal processing delays.
 - A review of program data contributed to revisions in the criteria related to property crime offences in 2020. Analysis of DNA recovery from clothing and textiles showed rates of successful extractions to support DNA analysis were low. As such, this line of service was discontinued – all clothing and textiles that are part of a non-violent, property crime offence (e.g. break and enter) are no longer accepted for DNA analysis.
 - Prior to 2024, the BSP would not accept requests for BCA previously analyzed by external laboratories. In response to client/stakeholder demand, the BSP revised the Case Splitting Policy to allow previously analyzed exhibits/cases if they met specific criteria to ensure any issues/limitations were clearly defined.
 - The BSP has reviewed and revised its orientation program and understudy training for new hires to streamline the process and reduce the time required for completion.
- Many interviewees indicated that initiatives and practices implemented to date have streamlined processes as much as possible within current resourcing levels. Evidence indicates that BSP operations are relatively lean, and only marginal efficiency gains in terms of turnaround times can be expected without additional resourcing.



Major events for BSP and BCA services that had an impact on program delivery

- | | |
|-----------|---|
| • 2013/14 | Lab locations reduced from six to three sites |
| • 2018 | Y-chromosome Short Tandem Repeat analysis offered by BSP |
| • 2020 | Policy changes to restrict clothing and accessories in property crime due to low probability of results |
| • 2023 | A new forensic analysis and interpretation software (STRMix™) introduced as new service line |
| • 2024 | BSP eases case-splitting policy and removes fibre recovery as a service due to low probability of results |
| • 2025 | Cold and historical cases accepted for STRMix™ analysis |

There are several key factors that impact the BSP's ability to improve the efficiency and timeliness of BCA service delivery.

- Resourcing challenges (human and financial) limit the BSP's ability to fully staff vacant positions, including support positions, and/or to outsource work to other labs.
- Time required to hire and onboard new staff, as well as security and medical clearances, can be considerable and limit viability of temporary assistance for BCA service delivery.
- Although the orientation for new hires and the understudy program are essential, the training required before new employees are ready to work independently typically takes two years.
- Procurement processes, including the justification of sole-source vendors, and challenges in aligning purchasing limits with rising operating costs for major capital investments and evergreening, demand substantial time and effort from staff, diverting them from other critical operational tasks.
- There is a lack of IT support and infrastructure specific to BCA. IT resources do not align with the level of support required for three laboratory facilities, and operations are impacted by a lack of up-to-date forensic-specific software and systems.
- There are challenges associated with the maintenance and operational readiness of aging facilities. General managers are sometimes required to spend significant periods of time interacting with property management to ensure the maintenance and upkeep of aging facilities to support operations.

- This is particularly problematic for managers at the Edmonton lab, which is in need of major repairs to address such issues as poor drainage and a leaking roof.



Images of water intrusion in the Edmonton lab's evidence recovery storage

BSP staff are responsible for administrative activities which are critical to operations but divert them away from processing case work.

- A lack of sufficient human resources contributes to overtasking of staff. In addition to their primary roles and responsibilities, BSP staff are called on to provide support to activities that are critical to BCA operations (e.g. validations, accreditations, testing, training, audits and reviews), that would be addressed by others if all positions were filled.
- In assigning tasks and overtime to meet demand for services, managers are also mindful of impacts on the well-being of staff who routinely work with materials and evidence related to alleged sexual assaults, homicides, etc. that can have detrimental impacts on their mental health.

Why it matters

While it is important for the BSP to review and find efficiencies to meet service delivery standards, this must be balanced with ensuring appropriate workloads and distribution of tasks in order to safeguard the mental and physical health and well-being of employees.



FINDING #4

While data systems and performance measures exist, there are insufficient performance metrics to tell the story of program capacity.

Performance Measurement and Reporting

Program documentation indicates that the BSP maintains a robust data infrastructure and employs performance measurement tools (LIMS and LARS) that support operations and generally fulfill BCAA reporting requirements.

LIMS is an industry software that is used by forensic labs to manage samples from intake to reporting and discharge of evidence. It can automate workflows, integrate instruments, and manage samples and associated information. It can also track data from sequencing runs over time and across experiments to enhance efficiency.

LARS collects employee activity information that is not captured by LIMS that is used to produce performance reports for team leaders, including position, available weeks for work, actual output metric, expected metric, vacation time, court time, sick time, overtime, total activity, and availability for casework hours.

Knowledge, use of reports and participation in Regional Client Consultation Committees (RCCCs) varies significantly across and within the P/Ts.

- The BSP has regularly delivered standard reports with high-level performance information to P/Ts and PS on a quarterly basis over the past five years.
- In addition, senior managers present reports and address client concerns at regular RCCC meetings.
- Smaller detachments and police agencies with lower volumes of BCA requests tended to be unaware of performance reporting and the RCCCs. In contrast, larger police agencies with higher volumes of requests reported using the information provided by the BSP and attending RCCCs to communicate any issues.
- Perspectives of P/T stakeholder interviewees varied as well. Amongst the small sample of representatives, many were unaware of the information available.

Most clients / stakeholders who were aware of and used BSP performance information indicated it was useful. It was noted by some P/T representatives that additional information would increase accountability and transparency, which is something they noted could be built into future BCAAs.

Performance metrics to support decision-making

Quality of Metrics

Performance metrics have been introduced to define baseline output levels to meet service standards for routine service requests. However, current performance metrics may not be sufficient to fully tell the program’s performance story to support decision-making.

Program staff have noted that current metrics may not accurately reflect variations in the time, effort and complexity involved in all activities—such as training, post-analysis data cleaning, or testing. Because the staff responsible for casework are also managing numerous other tasks, it is difficult to measure these activities consistently. Some tasks take significantly longer than others, and this variability is not captured in the existing metrics.

To fully understand the extent to which the BSP has the necessary capacity to meet the current service standard for routine cases, it is essential to develop metrics that accurately represent the time and resources required for the full scope of work.

Use of Metrics

While BSP systems are sufficient for operational purposes, the quality and completeness of data entry across the program can be inconsistent, and exporting data from the current systems is complex and requires time-consuming manipulation for analysis and reporting.

Internal communications to BSP staff may not have sufficiently outlined the purpose and use of established performance metrics to help ensure consistent data collection, tracking and reporting.

Without reliable metrics to determine whether the program has sufficient staff capacity (without excessive overtime) to process 9,500 cases per year according to established service standards, there is a risk that the BSP will continue to struggle to meet this standard in the future. Additionally, the increased use of new services—such as STRMix™—could further impact overall performance and output in the years to come.



BSP management has acknowledged concerns regarding the current performance metrics, and efforts to refine them appear to be ongoing.

Why it matters
Without reliable performance measures, the RCMP lab will not be able to accurately track or determine its true capacity to deliver BCA services within established service standards or support strategic decision making.

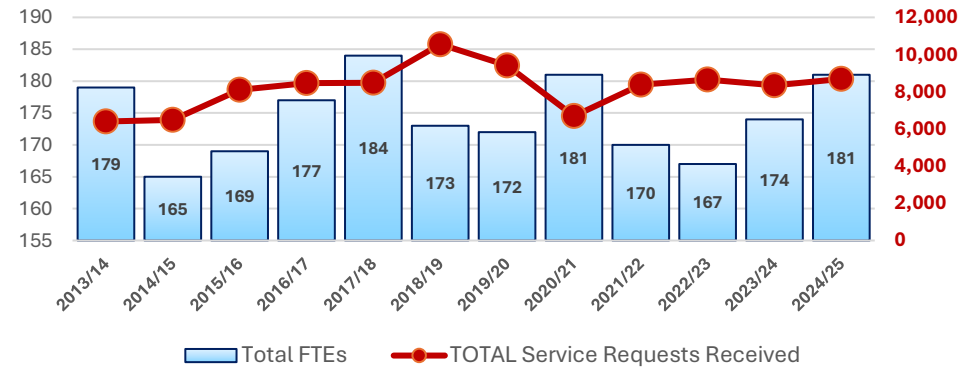


FINDING #5

The BSP is at risk of not being able to ensure long-term sustainability.

Resources and efficiency

The total number of BCA service requests peaked in 2018/19 (10,554) before sharply declining during the COVID-19 pandemic. Since 2021/22, the number of service requests has steadily increased – moving toward pre-pandemic levels. In contrast, staffing levels declined following the pandemic and only returned to pre-pandemic levels in 2024/25.

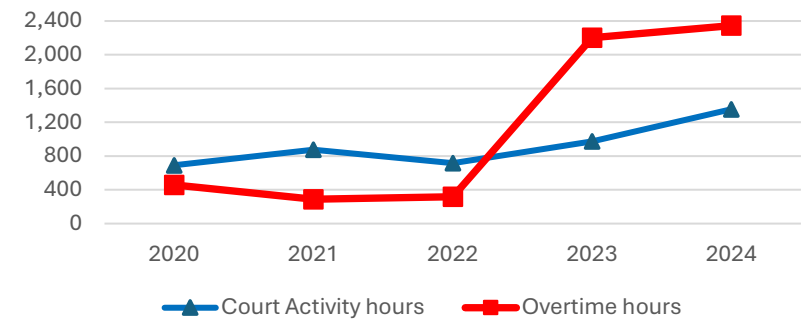


A key consequence of potential resource gaps is staff working on tasks outside of their primary roles, which limits the efficiency of service delivery.

Overtime was leveraged to address demand for BCA Services

To facilitate current service delivery levels and required operational support, overtime hours for lab staff increased significantly between 2022 and 2024.

- *Accrued overtime between 2022 and 2023 increased 589.3% (320 to 2,203 hours).*
- *Overtime increased another 6.5% (2,203 to 2,345) the following year.*
- *During the same period, court time for reporting scientists increased – which may reflect preferences of judges or crown prosecutors for in-person testimony.*



- Any surge capacity for the RCMP lab to effectively respond to critical incidents has been diminished by an overuse of overtime hours to meet current service demands.
- Interviewees indicate the escalating workload is increasing stress levels and sick leave among lab staff. That said, BSP management has made efforts to prioritize the mental health and wellness of employees by promoting RCMP resources and support, use of quiet areas, and the creation of staff committees and other initiatives to encourage mental health (e.g. mental health champions, allotted time to seek out mental health supports).

Implementation of technology and impact on operational capacity

Activities related to testing, validating, and implementing technology are time consuming, but necessary to ensure processes are standardized, and analysis and products can withstand court scrutiny.

The RCMP lab has limited capacity to conduct research and development on new and emerging technologies and supporting policy without having an impact on operational capacity. As a result, implementation of new technology such as STRMix™ and Rapid DNA has taken longer than in other labs that provide BCA services.

- Unlike the Ontario and Quebec labs, the BSP does not have multiple, dedicated positions to conduct research and development on new and emerging technologies; rather, this is done by one person.
 - Scientific staff tasked with assessing and implementing technology perform these duties in addition to their primary roles.
- Policy and administrative staff are frequently diverted from their primary responsibilities to support activities such as training, mentoring, certification processes, audit and review preparation. As a result, their core duties may be deprioritized or delayed

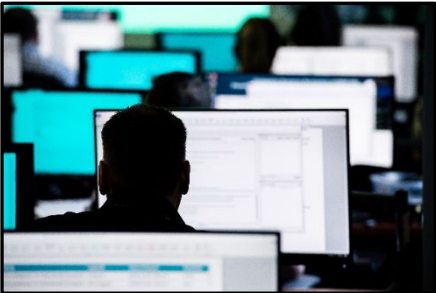
The impacts of onboarding new technology are unknown and may further impact operational capacity. Moving forward, the RCMP lab’s inability to meet current service load timelines could be hindered by the volume of requests for re-analysis of historical files and cold cases using STRMix™. Future onboarding of Rapid DNA will likely further exacerbate capacity issues and gaps in service.

IT systems and support

There is a risk that the BSP will not have sufficient internal support to ensure IT systems are maintained now and into the future.

- Current IT staffing levels are insufficient to meet the demands for support from the three laboratory locations. *Consistent and reliable compatibility between aging scientific software, internal tools and upgrading RCMP systems (e.g. ROSS) are integral to operations but present a challenge with limited staff.*
- There is a need to upgrade the WIX website linked to an up-to-date version of the LIMS software. *The BSP’s WIX website provides clients/stakeholders (external to the RCMP) with access to information and policy updates. Unlike other labs, the BSP is using a dated version of LIMS that does not accept electronic client requests. Rather, requests are imported from PDF documents.*
- There is a need to develop online training/reference videos, as well as to maintain and upgrade internal software and tools. *In contrast to other labs, the BSP does not have a client interface that supports the development or posting of videos for online client training/reference. Furthermore, internally designed IT tools critical to operations are managed in-house by a scientist nearing retirement with other primary responsibilities.*
- Interoperability between site and BSP IT infrastructure impacts operations. *Processing speed of workstations slows down incrementally as each site comes online – casework is delayed due to slow connectivity. In addition, during the reference period, the number of STRMix™ licenses did not align with the number of scientists who require use of the software. Staff had to wait for licenses to become available.*

Without sufficient IT to address these and other issues, the program is at risk of further service disruptions and delays to BCA support.



Communications strategy

The BSP does not have a formalized communications or education strategy to engage its clients and stakeholders and P/Ts on a continual basis.

- Some clients/stakeholders expressed a desire for more BSP communications regarding issues impacting the lab’s ability to deliver services.
- Some crown prosecutors expressed a desire for specific communication mechanisms to facilitate timely cancellation of requested BCA services (e.g. changes in service need due to plea arrangements, confessions, etc.).
- Some clients/stakeholders who were unaware of RCCCs expressed a desire to participate in information sharing sessions.

Insights from Quebec and Ontario labs suggest that enhanced strategic engagement with clients, supported by education and communication initiatives, can improve both the effectiveness and efficiency of service delivery.

Enhanced client engagement can result in:

- Better client understanding of BCA requirements and selection of exhibits.
- Enhancement of the number of BCA requests that are lab-ready, thereby reducing time spent on interactions at the intake phase.
- Better management of client/stakeholder expectations and misconceptions of the lab’s mandate and capacity, as well as the benefits and limits of new technology.

Professional development / training

Limited resources and access to external professional development and collaborative opportunities (e.g. conferences) constrain the program’s ability to stay current with emerging techniques and technologies.

- Lack of professional development can limit specialized learning and impact recruitment and retention when compared with learning offered by other labs.
- Through interactions with external colleagues, scientists can gain broader knowledge of new technology as well as any pros and cons based on colleagues' experiences (e.g. actual costs and limits of technology, maintenance levels, etc.).

Strategic and human resources planning

The BSP does not have formalized strategic or human resources plans in place to address such key issues as recruitment and retention, evergreening of dated technologies and equipment, and evergreening of existing infrastructure. This is problematic for several reasons, including:

- The Edmonton and Ottawa sites will require substantial investment for renovation or replacement in the next five to ten years.
- There is a lack of succession planning for key program staff, and for the impending retirement of a large cohort.
- Onboarding of new staff and completion of the understudy program are lengthy (approximately two years) but are essential processes that need to be constantly factored into human resources planning.
- Aging equipment and technology that is key to operations will need replacement in the near future, which will require time and effort to secure funding sources and facilitate lengthy procurement processes.

Why it matters

There are a myriad of challenges in critical areas such as staffing, recruitment and retention, outdated technologies and equipment, and aging infrastructure that threaten the sustainability of the Biology Services Program. Formalized strategic and human resources plans are required to address these issues in a cohesive and consistent manner and build a foundation for a sustainable future.

Conclusions

- Overall, BCA services (e.g. analysis, reporting, and court activities) are highly valued and relied upon for the administration of criminal justice. Excluding Ontario and Quebec, the RCMP lab is the main provider for BCA services for police agencies and court systems across Canada through its three sites located in Surrey, Edmonton, and Ottawa.
- Although the BCAAs have provided an adequate general framework for the delivery of BCA services, there are gaps within the agreements that limit information sharing, understanding of client needs, operational effectiveness and efficiency, and development and management of reasonable expectations. Information from the evaluation should be used to inform the BCAA renegotiation process.
- Although meeting client demand for priority service requests, the RCMP lab has not been able to meet the past and current service standards for routine requests – even with the extensive use of overtime over the past two fiscal years. It is not clear that the BSP will be able to meet the service standard moving forward with current resourcing. Without sufficient resources to improve NFLS staff capacity, available staff are overtasked with activities necessary to support current and ongoing operations that pull them away from their primary responsibilities (i.e. casework).
- In addition to addressing human resources challenges, in order to meet current and future demands the BSP will also need to focus on the evergreening of existing technology and aging facilities.
- Evidence indicates that the BSP is not sustainable in its current form and with current resourcing levels. To address these risks without downgrades or interruptions in service delivery, there is a need for the RCMP to develop strategic and human resources plans that realistically outline the BSP's mandate, short and long-term service lines, identification of priorities, and identification of resourcing options to modernize operations.
- There is also a need for better communication, both internally and externally, as well as the refinement and consistent use of performance information.

Recommendations

1. Formalize a forward-looking human resources plan to ensure the Biology Services Program has a sufficient pool of trained resources to meet current and future client needs for biology casework analysis services and ensure the long-term sustainability of the program.
2. Formalize a strategy to ensure the Biology Services Program has appropriate facilities, maintenance, and evergreening of technology to meet current and future client needs for biology casework analysis services and ensure the long-term sustainability of the program.
3. Improve communication practices and protocols to better support information sharing within the Biology Services Program and with clients and stakeholders.
4. Refine performance measurement activities to accurately assess capacity to process cases and to support decision-making, reporting, accountability and transparency.

Appendices

A. Management and Action Plan

Slide #

27-29



Appendix A: Management Response and Action

Forensic Science and Identification Services (FS&IS) have reviewed the evaluation report and are supportive of its content and recommendations. Our National Forensic Laboratory Services team (NFLS) will work collaboratively to formalize and implement the Management Response and Action Plan relating to the recommendations identified in this report with an overall objective of improving the effectiveness and efficiency of the RCMP's Biology Service Program (BSP) and ensuring current and future client needs for biology services are met. The achievement of the planned actions outlined in this MRAP within the identified timelines is contingent upon NFLS having adequate financial and human resources to do so. NFLS commits to sharing this evaluation report and MRAP with Public Safety Canada colleagues to inform the renegotiation of the BCAAs.

Recommendation	Lead / Area of Responsibility	Planned Action(s)	Diary Date
1. Formalize a forward-looking human resources (HR) plan to ensure the Biology Service Program has a sufficient pool of trained resources to meet current and future client needs for biology casework analysis services and ensure the long-term sustainability of the program.	Director General, NFLS Working with: Corporate Management	A. NFLS to complete a Workforce Analysis to assess: • Current workforce state (composition, skills, demographics, and performance) • Future needs (forecast future requirements based on strategic goals) • Gap analysis (identify gaps between capabilities and future needs) B. NFLS to Identify HR priorities for 2026-27 and 2027-28, and an additional 5-year outlook as well as an implementation plan, including a funding assessment. Initiatives to be rolled out in phases with timelines and responsibilities while remaining flexible to adjust based on changing direction from senior management and/or context (example; budget reductions, new BCAAs). Areas of focus include talent acquisition and retention, leadership development, DEI, employee engagement and well-being, learning and development. KEY DELIVERABLES: 1. Workforce Analysis Report and HR priorities for 2026-27 as described above (Delivery Date 2026-06-01) 2. NFLS to Identify HR priorities for FYs 2027-28 and an additional 5-year HR outlook that identifies potential upcoming retirements/turnover, and training requirements to assist with future needs analysis. (2027-06-01)	June 2027

Recommendation	Lead / Area of Responsibility	Planned Action(s)	Diary Date
2. Formalize a strategy to ensure the Biology Service Program has appropriate facilities, maintenance, and evergreening of technology to meet current and future client needs for biology casework analysis services and ensure the long-term sustainability of the program.	Director General, NFLS Working with: Corporate Management, Real Property	▪ With the support of Corporate Real Property, conduct a comprehensive assessment of current facilities, maintenance practices, and technology assets. ▪ Identify gaps and future requirements based on service trends, existing instrument lifecycles and client needs, including costing exercise. ▪ Develop strategic objectives with goals to assess core services, prioritize onboarding of new technology/services, optimize laboratory space, improve maintenance reliability, and implement a technology lifecycle plan. ○ Assessment of core services to include consideration of efficiency adjustments for existing services, enhancing research and development capabilities, and consideration of adoption of new services with high probative value (based on the latest technology and scientific forensic information). KEY DELIVERABLES: 1. Engage with Real Property: Summary of current laboratory space, infrastructure, and maintenance reliability (2026-06-01) 2. Technology Inventory & Lifecycle Analysis: Generate a list of current instrument assets with lifecycle stage and upgrade needs (2026-04-01) 3. A multi-year Technology Evergreening and Procurement Plan for existing assets (2026-10-01-2026) 4. Technology Gap and Needs Analysis: Conduct a technical review of current and emerging technologies to identify capability gaps. The analysis will include recommendations for new technology, with implementation guidance informed by the technology’s forensic value, as well as resource barriers such as funding, staffing, and infrastructure limitations. Engage stakeholders in relation to their technology needs. (2027-06-01)	June 2027

Recommendation	Lead / Area of Responsibility	Planned Action(s)	Diary Date
3. Improve communication practices and protocols to better support information sharing within the Biology Services Program and with clients and stakeholders.	Director General, NFLS	While NFLS meets the current BCAA reporting requirements, we will develop and deliver on key deliverables that include: A. internal collaboration protocols using centralized platforms (e.g. MS Teams, SharePoint) and modernization of the location and content of the NFLS Policy Library; B. external engagement plans tailored to stakeholder groups; C. plain-language summaries and periodic updates to clients and employees aligned with communications policy; D. oversight mechanisms such as designated liaisons and feedback loops; and E. alignment with TBS policies, privacy, and official languages requirements. KEY DELIVERABLES: 1. NFLS Collaboration & Communications Protocol Guide: Covers use of MS Teams and SharePoint, naming conventions, access controls, and roles (e.g. coordinators, point persons, collaborators, etc.) (2026-06-01) 2. Rationalization of NFLS Policy lifecycle process and clarify governance (2027-03-01) 3. Development of client portal requirements: including content type, approvals process, and potential hosting platforms, can include costing. If phased approach is taken, would include limitations at each stage. (2026-09-01) 4. Stakeholder Engagement and Feedback Plan: Maps stakeholder groups, preferred channels, and engagement frequency feedback tools (e.g. surveys, forms) and response tracking; templates for plain-language summaries aligned with GC Communications Policy (2027-03-01)	March 2027
4. Refine performance measurement activities to accurately assess capacity to process cases and to support decision-making, reporting, accountability and transparency.	Director General, NFLS Working with FS&IS Business Intelligence, Digital Program	▪ Develop a performance measurement framework that includes indicators for efficiency, quality, and workload. ▪ Ensure inclusion of non-casework activities (e.g., training, testimony, program support). ▪ Align metrics with business processes and service standards. ▪ Use dashboards and analytics tools to monitor trends and forecast capacity. ▪ Establish protocols for communicating metrics and results to stakeholders in plain language and integrating feedback into continuous improvement. KEY DELIVERABLES: 1. Performance Measurement Framework: Core document defining metrics for work performed and identification of non-casework activities (2027-04-01) 2. Development of requirements for Tool/Dashboard with Forecasting: to monitor trends, visualize performance, and assess capacity for casework and non-casework activity, will include costing (2027-02-01)	April 2027