

Audit of the College and Community Innovation Program

Corporate Internal Audit Division
Natural Sciences and Engineering Research Council of Canada
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1 EXECUTIVE SUMMARY

Background

The College and Community Innovation (CCI) Program is managed by the Natural Sciences and Engineering Research Council of Canada (NSERC) in collaboration with the Social Sciences and Humanities Research Council of Canada (SSHRC) and the Canadian Institutes of Health Research (CIHR).

The objective of the CCI Program is to increase innovation at the community and/or regional level by enabling Canadian colleges to increase their capacity to work with local companies, particularly small and medium-sized enterprises (SMEs). It supports applied research and collaborations that facilitate commercialization, as well as technology transfer, adaptation and adoption of new technologies¹.

The College and Community Innovation Pilot (CCIP) program was launched in 2004; based on the success of this program the permanent College and Community Innovation (CCI) Program was officially launched in 2008-09 following a Government of Canada (GOC) announcement in Budget 2007, and in the Federal Science & Technology Strategy. The program initially only included the Innovation Enhancement (IE) Grant. Later on, additional grants were added, including:

- The Applied Research and Development (ARD) grants;
- The Applied Research Tools and Instruments (ARTI) grants;
- Technology Access Centre (TAC) grants;
- The Industrial Research Chairs for Colleges (IRCC) grants;
- The College University Idea to Innovation (CU-I2I) grants; and
- Entry Level IE Grants.²

Why it is important

The CCI Program has experienced rapid growth since it was officially launched in fiscal year 2008-09. Over the last three fiscal years the CCI Program has received incremental government funding (expenditures of \$31.3 million in 2011-12 and \$35.2 million in 2012-13), with a substantial injection in 2013-14 resulting in total grant expenditures of \$46.4 million.

As a result of growth and significant increases to funding, an audit of the College and Community Innovation Program was identified in the NSERC 2014-17 Risk-Based Audit Plan (RBAP). It is also noteworthy to mention that the program has never been audited.

Audit objective and scope

The objective of this audit was to provide assurance that governance, risk management and internal controls related to this tri-agency program were adequate and effective. The scope of the audit work covered all key areas of the program from governance through to performance reporting from April 1, 2011 to March 31, 2014.

¹ NSERC web site (http://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/Info-Info_eng.asp)

² Evaluation of the CCI Program, February 2013, Goss Gilroy Inc.

Key audit findings

The official launch of the CCI Program occurred just over five years ago, and while the CCI Program is relatively young compared to other tri-agency programs (i.e., Networks of Centres of Excellence), the audit found that key areas were well managed. These areas included a robust process in place to evaluate college eligibility. The current process provides reasonable assurance that only colleges which can clearly demonstrate appropriate stewardship are granted CCI Program funds, a mechanism which helps ensure the funds are well controlled. Furthermore, the audit found that effective controls were in place at the program-level to ensure accuracy of payment awards and the tracking of recipient progress.

The audit identified the following strategic areas of improvement:

1. **Governance** - The audit found that the roles and responsibilities had not been clearly defined for the Program's oversight body—the Research Partnership Management Committee (RPMC). As such, it is unclear if this committee is actually performing the duties expected of an oversight committee, particularly in relation to risk management and performance.
2. **Risk Management** - The tracking and monitoring of program-level risks was found to be informal and based largely on the ad hoc sharing of information between the Director and Vice-President. It was noted that without a more formal approach, management has limited assurance that the risks which could negatively impact the program are sufficiently mitigated. Examples of risks that have been unmitigated are reflected in the audit findings in this report (i.e., risk related to compliance with key frameworks).
3. **Performance Measurement** - The CCI Program collects data from the colleges and the colleges' business partners through the submission of progress reports and final reports; however, to date, the data has not been compiled and maintained to actively monitor the overall performance of the program. With the absence of the ongoing monitoring of key performance indicators, management is limited in its assessment of whether or not the program is meeting its objectives from year to year.

In addition to the aforementioned strategic areas, the audit identified a number of operational improvements for management's consideration:

4. It was noted that the level of justification for award decisions was not consistent between the two grant types selected for detailed file review. Testing of application files revealed that the Innovation Enhancement (IE) grants were assessed using established criteria, and award decisions were well justified and documented, whereas the Applied Research Tools and Instruments (ARTI) grants were awarded with limited documented justification. The limited justification may have been as a result of the large injection of new funding in 2013-14 that was directed to the ARTI grant and resulted in a substantial increase in the demands on the CCI Review Committee—the Committee responsible for reviewing all applications. Without a consistent approach to

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- documenting the justification of all awards, the CCI Program risks not being able to defend award decisions should they be challenged in the future.
5. Grant award recommendations made by the external CCI Review Committee are not being reviewed by program management prior to final approval of grant awards. Without the review of the recommendations made by the Committee at the program-level (i.e., ensuring that the rationale for funding is complete and sufficient, verifying that recommended proposals are aligned with the program objectives), management cannot be assured that recommendations have been made with an appropriate level of due diligence.
 6. No consistent, formal approach has been established for the submission and review of grant holder budget reallocations and grant extension requests. As a result, inconsistencies were found in the documentation submitted and maintained to support these requests (i.e. thorough documentation vs. e-mail requests and approvals and verbal confirmations). In the absence of a formal and consistent process, compliance with key sections in a number of important frameworks (see p.14) intended to enhance control and mitigate risk related to the use of CCI funds is difficult to demonstrate.

Conclusion

The CCI Program—officially launched in 2008-09—is a relatively young program compared to many other tri-agency and NSERC programs. The CCI Program has successfully delivered its suite of grants since this time while also managing the development and on-boarding of new grant opportunities as recently as 2011-12. Many of the audit findings reflect the context of managing a program which is both maturing and expanding at the same time. While effective controls were found in the areas of college eligibility and award approval and payment, the audit found improvements were necessary in the areas of governance, risk management and performance monitoring.

It should be noted that during the course of the audit, the CCI Program was in the process of increasing its human resource capacity to address increased administration demands. While this was not part of the audit scope, an increase in human resources could allow management more time to focus on developing critical strategic functions which support program administration, such as governance and risk management.

It is important to note that the need for improvements to governance, risk management and performance measurement is not limited to the CCI program. Similar audits of other NSERC and tri-agency programs have also identified improvements in these areas at the program-level, suggesting these may be systemic matters for senior management's broader consideration.

2 BACKGROUND

The Natural Sciences and Engineering Research Council of Canada (NSERC) supports scholarly endeavors in Canada's post-secondary institutions. NSERC funds students in their advanced studies, promotes and supports discovery research, and fosters innovation by encouraging Canadian companies to participate and invest in post-secondary research projects in the natural sciences and engineering (NSE). NSERC is a departmental agency of the Government of Canada and reports to Parliament through the Minister of Industry.

The College and Community Innovation (CCI) Program is managed by the Natural Sciences and Engineering Research Council of Canada (NSERC) in collaboration with the Social Sciences and Humanities Research Council of Canada (SSHRC) and the Canadian Institutes of Health Research (CIHR).

The objective of the CCI Program is to increase innovation at the community and/or regional level by enabling Canadian colleges to increase their capacity to work with local companies, particularly small and medium-sized enterprises (SMEs). It supports applied research and collaborations that facilitate commercialization, as well as technology transfer, adaptation and adoption of new technologies³.

The College and Community Innovation Pilot (CCIP) program was launched in 2004. Based on the success of this program, the permanent College and Community Innovation (CCI) Program was officially launched in 2008-09 following a Government of Canada (GOC) announcement in Budget 2007, and in the Federal Science & Technology Strategy. The program initially only included the Innovation Enhancement (IE) Grant; however, later on, additional components were added, including:

- The Applied Research and Development (ARD) grants;
- The Applied Research Tools and Instruments (ARTI) grants;
- Technology Access Centre (TAC) grants;
- The Industrial Research Chairs for Colleges (IRCC) grants;
- The College University Idea to Innovation (CU-I2I) grants; and
- Entry Level IE Grants.⁴

The CCI Program has experienced rapid growth since it was officially launched in fiscal year 2008-09. Over the last three fiscal years the CCI Program has received incremental government funding (expenditures of \$31.3 million in 2011-12 and \$35.2 million in 2012-13), with a substantial injection which occurred in 2013-14 resulting in total grant expenditures of \$46.4 million.

The Audit of College and Community Innovation Program was identified in the NSERC 2014-17 Risk-Based Audit Plan (RBAP). Although the CCI Program currently has a mid-sized funding envelope in comparison to other NSERC programs, it has a high

³ NSERC web site (http://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/Info-Info_eng.asp)

⁴ Evaluation of the CCI Program, February 2013, Goss Gilroy Inc.

significance/exposure due to injections of new money from recent federal budgets. The CCI Program has never been audited.

3 AUDIT OBJECTIVE AND SCOPE

The objective of the audit was to provide assurance that governance, risk management and internal controls related to this tri-agency program are adequate and effective.

The scope of the audit work covered all key areas of the CCI Program from governance through to performance reporting. The audit work examined documentation from April 1, 2011 to March 31, 2014.

The scope of this audit excluded an assessment of the Agencies' Financial Monitoring function, whose main responsibility is to assess the effectiveness of the policies, systems and internal controls at eligible colleges through the conduct of reviews. This process was reviewed as part of the NSERC – SSHRC Audit of Financial Monitoring; the audit report was posted in the fall of 2014.

In addition, Finance's role in the payment award process (i.e. Section 33 approval) was not included in the scope of this audit. The process is not unique to the CCI Program, and the controls have been subject to testing as part of an Account Verification and Improvement (2012) assessment as well as the [Audit of the Networks of Centres of Excellence Program](#).

4 AUDIT METHODOLOGY

The audit was conducted by a team from PricewaterhouseCoopers with participation from the Corporate Internal Audit (CIA) Division. The audit team used the following methodology to conduct its work:

- File and document review of various sources of information—including committee meeting minutes, the program evaluation, planning documentation, policies, guidelines, the NSERC web site, etc. This also included testing program procedures and award adjudication documentation;
- Interviews with internal key stakeholders involved in the delivery of the CCI Program—including the Vice-President of the Research Partnerships (RP) Directorate, the Director and Deputy Director, program staff, as well as members of the Finance and Awards Administration (FAA) Division, the NSERC Secretariat and the SSHRC Corporate Strategy and Performance Division;
- Effectiveness testing for a sample of grants; and
- Effectiveness testing for a sample of college eligibility applications.

The audit engagement was conducted in conformance with the Treasury Board's (TB) [Policy on Internal Audit](#), the [Internal Auditing Standards for the Government of Canada](#), and the Institute of Internal Auditors (IIA) [International Standards for the Professional Practice of Internal Auditing \(Standards\)](#). These standards require that sufficient and appropriate audit procedures be conducted and that evidence be gathered to provide a

high level of assurance on the findings contained in this report. The conclusions were based on a comparison of the situations as they existed at the time against the audit criteria (Appendix I).

5 KEY AUDIT FINDINGS

5.1 Governance

Governance has a myriad of definitions and depends on a variety of organizational, structural, and cultural factors. While no one definition is used as a 'golden standard', the IIA standards define governance as:

“the combination of processes and structures implemented by the board⁵ to inform, direct, manage, and monitor the activities of the organization toward the achievement of its objectives” (2011).

Guidance provided by the Office of the Comptroller General (2011) expands on the above definition and suggests that oversight bodies should have clear roles with respect to risk management and control to ensure objectives are achieved.⁶

5.1.1 The CCI Program governance could benefit from greater formality.

The audit found that key pieces of governance were in place for the CCI Program at the operational level, such as delegation of financial authorities and job descriptions for the Vice-President, director and other members of the management team. However, at the committee-level, the audit found that roles, responsibilities and relationships had not been clearly defined. For example, during the course of the audit, the audit team was informed that the Research Partnership Management Committee (RPMC)—led by the Vice President and including the Directors of the Research Partnerships Directorate had implicit responsibility for overseeing the management of the CCI Program. The role of overseeing a program is usually the most critical role in effective program management since the committee is responsible for ensuring that risk management processes are established and working effectively, risks are escalated and sufficiently mitigated and the program is positioned to successfully achieve its objectives. While delegation of the oversight role to the RPMC is appropriate, the audit found there were no Terms of Reference (or information provided in the Program's Terms and Conditions) to clarify its authority, roles and accountabilities, nor its relationships with other NSERC committees or external advisory committees (i.e., Committee on Research Partnerships). Furthermore, there were no formal minutes or records of decision for this key committee. As such, from an audit perspective, it is unclear if RPMC is actually performing the duties expected of an oversight committee, or if reporting in and out of this committee is optimal.

⁵ It should be noted that while the majority of departments within the Public Service do not have a 'board', senior management is acknowledged as playing this role.

⁶ Audit Criteria related to the Management Accountability Framework: A Tool for Internal Auditors. Office of the Comptroller General (2011).

It is possible that the CCI Program's need for greater governance formality stems from its maturity level. In comparison to some of the other more established tri-agency programs which have been operating for decades (i.e., Networks for Centres of Excellence), the CCI Program is relatively new—officially launched in 2008-09—and has been onboarding new grants as recently as 2011. Furthermore, the audit team was informed that since the CCI Program's inception, management has been challenged with adequately resourcing this growing and increasingly diverse program, suggesting that resources may have been focused primarily on the direct administration of the CCI Program. During the course of the audit, the CCI Program was in the process of increasing its human resource capacity to address their resourcing requirements.

Recommendation 1: It is recommended that management enhance efforts to formalize the CCI Program's governance and clarify the following:

- Roles and responsibilities of the Research Partnerships Management Committee, particularly in relation to risk and performance;
- Research Partnerships Management Committee's reporting relationships with CCI Program management, other pertinent NSERC committees and external advisory committees; and
- Escalation process for emerging issues and risks.

5.1.2 Program-level risk management occurs through the informal sharing of information.

In order for risk management to be effective it must occur at all levels within an organization. NSERC has developed a formal risk management framework and approach at the corporate level which it has been used for several years. In addition, the Agency is in the process of further developing its integrated planning approach which could have implications for how risks are managed at various levels within the organization in the future.

While risk management has been developed at the corporate level, the audit found that a formal risk management approach at the program-level has not yet been established within the CCI Program. More specifically, the key risks that may preclude the achievement of the CCI Program's objectives have not been formally documented and there is no systematic approach for the identification, communication and monitoring of emerging risks. Rather, the current approach to identifying and managing the CCI Program's risks is informal and based largely on the sharing of information between the Director and Vice-President. In the absence of a formal risk management process, the CCI Program has faced risks over the years that have not been formally assessed or mitigated. Some of these have been identified in this audit report (i.e., compliance inconsistencies in relation to key frameworks intended to manage program funds, Finding 5.2.6; awards granted without clear justification, Finding 5.2.2). It should be noted that issues related to risk management are not unique to the CCI Program. Several audit reports have also underscored important improvements to better manage program-level risks in other NSERC and tri-agency programs.

Without a systematic approach to the identification, assessment, documentation and communication of the key program-level risks, there is an increased possibility that risks

to the achievement of the CCI Program's objectives may be overlooked and as such, insufficiently mitigated and/or monitored.

Recommendation 2: It is recommended that the CCI Program formalize its risk management process to ensure that key risks that may prevent the program from meeting its objectives are systematically identified, mitigated and monitored.

5.2 Program Administration

The College and Community Innovation Program is a tri-agency program managed by NSERC. It is part of NSERC's Research Partnerships (RP) Directorate and is currently led by the Director of Colleges, Commercialization and Portfolio Planning, and includes a CCI Deputy Director and a complement of senior program staff and program assistants. All individuals on the team are NSERC employees. The CCI team is responsible for delivering the program and managing a variety of diverse activities such as, but not limited to, processing of proposals, managing of logistics for the peer review process, reviewing grant recipient progress reports and attending the CCI Review Committee meetings to support and frame committee proceedings. The CCI Program team also receives support from the RP Directorate's Manager, Research Partnerships Planning and Budget and the Senior Manager, Research Partnerships Strategic Planning.

In addition, key activities that are required to support the program are provided by:

- The NSERC Corporate Secretariats and the SSHRC Corporate Strategy and Performance Division, which provide final approval on college eligibility; colleges cannot receive any CCI Program funding until they are deemed eligible;
- The Finance and Awards Administration Division which is responsible for the award payment process; and
- The Information and Innovation Solutions (IIS) Division which is responsible for technical aspects, including the awards management systems/databases and access rights to these systems.

5.2.1 Colleges are consistently assessed against non-financial and financial eligibility criteria prior to being entitled to apply for CCI Program grants.

As stewards of public funds, it is important that the agencies ensure academic institutions receiving funds have been screened and deemed acceptable through a rigorous eligibility assessment. In order to be eligible to apply for and receive CCI funds, colleges must first apply to one of the three federal granting agencies (NSERC, SSHRC, CIHR) for eligibility status, depending on the research area of the college or their application(s). Recently, the three federal granting agencies harmonized their institutional eligibility process. This common process helps ensure that a standard and structured approach is used for assessing eligibility across the agencies. Previously, the agencies were assessing eligibility applications using slightly different approaches and requesting, at times, different information from the applicants.

The agencies' assessment involves the review of information provided to satisfy various non-financial criteria such as: attesting to having policies that follow the requirements of the agencies, having a research mandate, and for NSERC only, having degree/ diploma programs in the natural sciences and engineering. In addition, the non-financial assessment is complemented by an assessment of the college's financial viability and internal control environment and is conducted by Finance. Eligibility decisions are also informed by calculations that draw specific data from audited financial statements of the college to examine established financial ratios. These ratios help determine the financial viability of the institution and also provides insight into areas of interest for future financial monitoring.

The audit found that a robust system was in place to assess the eligibility and viability of colleges prior to granting funds. Furthermore, it was noted that colleges were consistently assessed against these criteria in a sample of both NSERC and SSHRC college applications, suggesting that a standard approach is used and due diligence is performed to ensure that the agencies only provide funds to colleges that meet the established eligibility standards.

5.2.2 The level of justification for award decisions varies between grant types.

IE Grants

The IE grant distributes the largest sum of funding of the CCI grants (\$18.7M in 2013-14) and accounted for 58% of the total CCI funding during the fiscal years in scope of this audit. Awards are up to \$100,000 per year for the Entry-Level IE Grant for a period of up to two years and \$500,000 per year for the first 3 years of the Five-Year IE Grant and up to 80% of the annual base funding for the fourth and fifth years.

The CCI Review Committee recommends IE proposals for funding to CCI Program management. The CCI Review Committee assigns three members as readers for each grant proposal. These readers review the proposal, as well as the assessments provided by external subject matter experts. The readers present the proposal to the CCI Review Committee for discussion purposes and final scores against pre-established criteria are decided upon by the Committee. Letters are then prepared and sent to each applicant outlining the results of the Committee's assessment and general feedback on the proposal. The audit found that IE proposal assessments were consistently completed using established criteria and award decisions were well justified and documented.

ARTI Grants

The ARTI grant is a small one-year grant, ranging from \$7,000-\$150,000 per award. With the recent influx of funding to the CCI Program, the ARTI grant was allocated a significant amount of additional funding (2013-14: \$10.3 M compared to \$Nil in 2012-13).

While the scope of the audit's file review spanned the last three fiscal years, few ARTI applications were awarded in 2011-12 (12 applications) and no call for applications was made during 2012-13. However, in 2013-14 the CCI Program received an influx of ARTI applications (145 applications) due to a large injection of funding by the government. During fiscal year 2013-14, it was decided that, due to the increased demands on the

CCI Review Committee, Committee members were not required to prepare feedback letters to ARTI applicants outlining the results of the Committee's assessment. Committee minutes and recommendation rationales gleaned from the evaluation sessions were not maintained during this time either. Instead, all that was maintained to support the ARTI funding recommendations made by the Committee was the scoring of each application—an excel spreadsheet containing numerical values only—representing the consensus of the Committee. As such, the audit found that the justification for awards was not clear for ARTI grants. Furthermore, the audit found that this had a direct impact on the work of program staff. Instances were noted whereby staff was unable to respond to requests made by applicants on the rationale for funding decisions without attempting to re-perform the review of the application originally performed by the CCI Review Committee. Without clearly documented justifications for award recommendations/decisions such inefficiencies may continue to impact the work of staff. Moreover, CCI Program management risks not being able to defend award decisions should they be challenged in the future.

Recommendation 3: It is recommended that the CCI Program maintain supporting documentation of all CCI Review Committee's discussions/decisions in order to ensure that evidence justifying significant funding recommendations is clear and available.

5.2.3 *Review of the CCI Review Committee's recommendations by CCI Program management prior to finalizing grant decisions would provide greater assurance of due diligence.*

According to the CCI Program's Terms and Conditions, it is the responsibility of the CCI Review Committee, a body comprised entirely of external members, to assess and make recommendations for funding to the CCI Program. However, the responsibility for making final grant decisions rests with the Agency.

Although the CCI Review Committee is completing the assessment of grant applications and providing funding recommendations to the CCI Program, it was noted that the recommendations made by the Committee were not being reviewed or challenged by CCI Program management prior to final funding approval. Rather, management, who are delegated authority for making the final funding decisions, were found to rely solely on the Committee to ensure the interests of the Crown were being considered and the objectives of the CCI Program were met. It should be noted that the audit team was informed that a representative from the CCI Program does attend the CCI Review Committee meetings. However, the role of this program representative, as the secretary to the committee, is to frame the committee's approach before the meeting, work with the Chair, and provide clarity to the committee on points of program policy during meetings.

Without a review of the recommendations made by the CCI Review Committee at the program-level (i.e. ensuring that the rationale for funding is complete and sufficient, verifying that recommended proposals are aligned with the program objectives), management cannot be assured that recommendations have been made with an appropriate level of due diligence.

Recommendation 4: It is recommended that CCI Program management develop a process for reviewing the CCI Review Committee assessments prior to signing Funding

Memos. This process could include both the review of award justifications provided by the CCI Review Committee to ensure they are complete, thorough and aligned with the objectives of the program, and retention of the evidence of this review, prior to signing the Funding Memos.

5.2.4 Award payments are approved by the appropriate delegated authority and payments are accurately dispersed.

As per the review of a sample of successful grant applications, the audit found that award payments were supported by the appropriate approvals prior to the disbursement of funds to recipients. Further, the audit noted that payment amounts were aligned to the approved payment schedules. These are critical financial controls in ensuring that program funds are only provided to designated recipients who have been vetted through the adjudication process and award payments are dispersed in the correct amount.

The audit noted that monthly financial reports, outlining the expenditures incurred to date, as well as grants' hard and soft commitments, are prepared and used for ongoing financial monitoring purposes within the CCI Program. These reports help ensure that the potential of lapsing funds is limited for all CCI Program grants and the program is working within its funding envelop, including the two ring-fenced grants—the College-University Idea to Innovation (CU-I2I) and Industrial Research Chairs for Colleges (IRCC) Grants—for which funding cannot be transferred to other CCI Program grants.

5.2.5 Checklists have been developed to ensure a systematic approach to monitoring the progress made by grant recipients.

The audit noted that, generally, the CCI Program staff requested, followed-up and received timely progress reports for both the IE Entry-Level and Five-Year grants. For the Entry-Level grant, a 12-month progress report is requested, and for the Five-Year grant, both an 18-month and 36-month progress report is required.

In order to ensure a systematic and consistent approach to the monitoring of the progress made by recipients, a checklist is used by the Program Officers in the review of the progress reports submitted by the recipients. The checklists are completed and signed off by the Program Officer prior to the release of the following installment of grant funds. This was noted as a mechanism which could help facilitate compliance with Treasury Board's Transfer Payment policy and potentially avoid issuing payments in advance of need.

5.2.6 No formal processes are in place to approve grant holder budget amendments and requests for grant extensions.

The 2013 CCI Program Tri-Agency Financial Administration Guide (Section: Deviation from Proposed Activities and/or Budget) stipulates that grant holders must obtain agency approval for the reallocation of more than 20% of any budget item, such as equipment and supplies, compensation-related expenditures, and travel and subsistence costs. While the Guide was found to be clear on this matter, it was noted that no consistent, formal process had been established for the submission and review of grant holder budget amendment requests. As a result, inconsistencies were found in the

documentation submitted and maintained to support budget reallocations in excess of 20%. For example, some budget amendments were supported by formal requests, including new revised budget estimates, while others were only supported by an email outlining why the request was being made with no revisions made to the budget estimate. Other amendments were found not to be supported by any documentation and approvals made verbally. It is arguable that this stipulation exists in the *Guide* to prevent a disproportionate amount of funds from being used for purposes that are not directly related to the funded research. However, without budget amendments being consistently submitted by the grant recipient and then formally approved, the Program may not be aware of unauthorized re-allocations until receipt of the Statement of Accounts and after the funds have been spent.

In addition to requiring approval for budget reallocations, the *2013 CCI Program Tri-Agency Financial Administration Guide (Section: Extension Period for Use of Funds Beyond a Grant Period)* also requires that grant holders submit a written request to the Program Manager for extensions to their funding. While this is clearly defined in the *Guide*, the audit found examples where funding had been extended without formal approval.

In the absence of a formal approach to the request and approval of both budget reallocations and extensions, there is a risk of non-compliance with a number of important frameworks established by TBS and NSERC to enhance control over the funds and mitigate risk (Terms and Conditions of the Program, i.e., Sections 28 -37 under Eligible Expenditures; the CCI Program Tri-Agency Financial Administration Guide, i.e., Sections on the Use of Funding and Annual Funding; and the TBS *Directive on Transfer Payments*, i.e., Section 6.4.4 under Cash Management).

Recommendation 5: It is recommended that the CCI Program develop a formal template for the request of both grant holder budget amendments and grant extensions. These templates should require each college to document justification for the request and provide their amended budget. Based on the receipt of each request, the CCI Program should implement a formal, consistent process to complete an appropriate assessment of the request and document the results and decisions.

5.2.7 Performance measurement is not sufficiently developed to provide assurance the CCI Program is meeting its objectives on an on-going basis.

The expected immediate, intermediate and final outcomes of the CCI Program have been documented in the *Logic Model*. Using this model, the Evaluation Division, in conjunction with the CCI Program, created a *Joint Results-based Management and Accountability Framework and Risk Based Audit Framework* (the Framework). This Framework outlines the proposed performance areas and targets for the CCI Program. Furthermore, this document identifies data sources and the timing/frequency of the measurement for each identified performance indicator.

Although the CCI Program has started collecting data from the colleges and the colleges' business partners through the submission of progress reports and final reports, the data

to date has not been used to proactively monitor the overall status of the CCI Program relative to its objectives⁷ to understand the Program's performance. In the absence of continuous measurement, performance risks might arise from year to year (i.e., specific expected objectives are not being achieved) which may not be mitigated in a timely manner. Rather than employing continuous performance monitoring, the audit team was informed that the CCI Program is reliant on the 5 year evaluation cycle to assess the CCI Program against the achievement of its objectives. This reliance is problematic as the 5 year evaluation cycle would not provide management with the 'in-time analysis' needed to respond quickly should the CCI Program's achievement on specific objectives not meet expectations. Additionally, the most recent and only evaluation conducted to date on the CCI Program, dated February 2013, focused on the most mature program component—the IE grant. The evaluation did not include a review of the other grant types which comprise the CCI Program.

Recommendation 6: It is recommended that the CCI Program establish continuous measurement of achievement against program objectives and communicate the results to management on a periodic basis.

6 CONCLUSION

The CCI Program—officially launched in 2008-09—is a relatively young program compared to many other tri-agency and NSERC programs. The CCI Program has successfully delivered its suite of grants since this time, while also managing the development and on-boarding of new grant opportunities as recently as 2011-12. Many of the audit findings reflect the context of managing a program which is both maturing and expanding. While effective controls were found to be implemented over college eligibility, award approval and payment; the audit found key improvements were necessary in the areas of governance, risk management and performance monitoring.

It should be noted that during the course of the audit, the CCI Program was in the process of increasing its human resource capacity to address increased administration demands. While this was not part of the audit scope, an increase in human resources could allow management more time to focus on developing the critical strategic functions which support program administration, such as governance and risk management.

⁷ According to Program literature available online, 'the objective of the CCI Program is to increase innovation at the community and/or regional level by enabling Canadian colleges to increase their capacity to work with local companies, particularly small and medium-sized enterprises (SMEs). It supports applied research and collaborations that facilitate commercialization, as well as technology transfer, adaptation and adoption of new technologies'.

Furthermore, it is indicated that, "Over the long term, the CCI Program will increase the economic development of the community and create new quality jobs based on know-how and technological innovation. This will be achieved by increasing the capacity of the colleges to transform the results of research and development (R&D) into economic activities easier and faster". The literature stipulates that the impact of the program will be demonstrated by 11 different factors.

Source: http://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/Info-Info_eng.asp#objective

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It is important to note that the need for improvements to governance, risk management and performance measurement is not limited to the CCI Program. Similar audits of other NSERC and tri-agency programs have also identified improvements in these areas at the program-level, suggesting these may be systemic matters for senior management's broader consideration.

7 MANAGEMENT RESPONSE TO AUDIT RECOMMENDATIONS

ITEM	*URGENCY RATING	RECOMMENDATION	MANAGEMENT RESPONSE	TARGET DATE
1.	12 months	<p>It is recommended that management enhance efforts to formalize the College and Community Innovation (CCI) Program's governance and clarify the following:</p> <ul style="list-style-type: none"> • Roles and responsibilities of the Research Partnerships Management Committee, particularly in relation to risk and performance; • Research Partnerships Management Committee's reporting relationships with CCI Program management, other pertinent NSERC committees and external advisory committees; and • Escalation process for emerging issues and risks. 	<p>The authorities and responsibilities of managing the CCI program, as with all NSERC programs, lie with the individuals in roles rather than the terms of reference for a committee. Notwithstanding, a Terms of Reference for the Research Partnerships Management will be established. The Directorate will further clarify the responsibilities for escalating emerging issues and risks in the CCI program.</p>	Dec. 15, 2015
2.	12 months	<p>It is recommended that the CCI Program formalize its risk management process to ensure that key risks that may prevent the program from meeting its objectives are systematically identified, mitigated and monitored.</p>	<p>NSERC has an integrated risk management process that systematically and formally identifies, mitigates and monitors key risks. The CCI program's risks are considered when developing NSERC's key risks. NSERC will formalize the risk management process for the CCI program and other partnership programs. These risk assessments will be used as part of the corporate risk planning and will form part of the Research Partnership (RP) Directorate's business planning process.</p>	Dec. 16, 2015
3.	12 months	<p>It is recommended that the CCI Program maintain supporting documentation of all CCI Review Committee's discussions / decisions in order to ensure that evidence justifying significant funding recommendations is clear and available.</p>	<p>NSERC will ensure that the CCI Program provides and maintains documentation that supports the funding recommendations of its review committee.</p>	July 1, 2015
4.	12 months	<p>It is recommended that CCI</p>	<p>NSERC staff are involved throughout</p>	July 1,

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		Program management develop a process for reviewing the CCI Review Committee assessments prior to signing Funding Memos. This process could include both the review of award justifications provided by the CCI Review Committee to ensure they are complete, thorough and aligned with the objectives of the program, and retention of the evidence of this review, prior to signing the Funding Memos.	the proposal evaluation process and provide assurance to support funding decisions by NSERC management. Staff are responsible for assuring that award justification information (see the previous recommendation) is complete, thorough, and aligned with the objectives of the program – and documented in the application files. NSERC will ensure that the program staff attest in funding recommendations that the committee's funding recommendations are complete, based on thorough discussions of the proposals, and aligned with the objectives of the program. This attestation will be reflected in the Funding Memos that are signed by management.	2015
5.	18 months	It is recommended that the CCI Program develop a formal template for the request of both grant holder budget amendments and grant extensions. These templates should require each college to document justification for the request and provide their amended budget. Based on the receipt of each request, the CCI Program should implement a formal, consistent process to complete an appropriate assessment of the request and document the results and decisions.	A formal template and defined processes will be developed for grant extensions and amendments. As above, best practice in other programs will be considered in implementing the template and associated processes.	April 1, 2015
6.	18 months	It is recommended that the CCI Program establish continuous measurement of achievement against program objectives and communicate the results to management on a periodic basis.	The CCI Program has developed and utilizes an in-depth set of performance indicators that measures its achievement against program objectives. The information collected in grantee reports and company comments supports management's assessment of performance against objectives. This provides measurement of grant performance – however this approach has limitations in terms of timeliness. Annually, Research Partnerships presents its advisory committee (the Committee on research Partnerships), with summary information on the performance of each program, including the CCI Program.	April 1, 2016

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			<p>NSERC anticipates implementing a timelier means of gathering key grant performance information that will allow better periodic monitoring of program performance, allowing program performance to be regularly communicated to management on a periodic basis.</p>	
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***Urgency Rating** of recommendations refers to the urgency of the recommendation based on the Agency's/Agencies' exposure to risk. Based on the "Urgency Rating", CIA Division recommends management actions associated with the recommendation be completed using the following timeline:

	6 months or less
	12 months or less
	18 months or less

8 APPENDIX I – AUDIT AREAS, CRITERIA AND SOURCES

AUDIT AREA	AUDIT CRITERIA	SOURCES
Governance		
Examine the extent to which the governance structure is clear and provides adequate oversight to ensure program objectives are met and risks are managed	An adequate and effective governance framework has been established and oversight is provided by management to ensure objectives are met and risks are managed.	Audit Criteria related to the Management Accountability Framework (<i>Office of the Comptroller General, 2011-Sections G1-G4, RM7 and PPL1-2</i>)
Risk Management		
Examine the extent to which the program identifies, assesses and mitigates program administration risks.	Management has identified the risks that may preclude the achievement of program objectives and has developed mitigation strategies that are regularly reviewed and reported on.	Audit Criteria related to the Management Accountability Framework (<i>Office of the Comptroller General, 2011-Sections RM1-RM3, RM6</i>)
Program Administration		
Examine the extent to which colleges are assessed using clear eligibility requirements.	Colleges are consistently assessed against clear and established eligibility requirements prior to allowing colleges to apply for CCI program grants.	Audit Criteria related to the Management Accountability Framework (<i>Office of the Comptroller General, 2011-Section RM3</i>) Science.gc.ca Institutional Eligibility Requirements for the Administration of Grants and Awards
Examine the extent to which applications for funding are assessed against clear criteria and award decisions are clearly documented.	Grant applications are consistently adjudicated against clear and established criteria and funding decisions are supported by a justified rationale.	Audit Criteria related to the Management Accountability Framework (<i>Office of the Comptroller General, 2011, Sections AC1 and AC3</i>)
Examine the extent to which award payments are approved and accurate.	Award payments are approved by the appropriate delegated authorities and payments are accurately dispersed.	Audit Criteria related to the Management Accountability Framework (<i>Office of the Comptroller General, 2011, Sections ST3, ST4, ST18</i>)

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		<i>and ST-20)</i>
Examine the extent to which the program's grant monitoring approach is clear and consistently applied to determine continued funding to awardees.	Monitoring of recipient progress occurs systematically. Furthermore, the monitoring process includes clear and well communicated expectations for determining progress for continued funding; and sufficient and relevant information is gathered, analyzed and reported on to assess progress.	Audit Criteria related to the Management Accountability Framework (<i>Office of the Comptroller General, 2011, Sections ST10, ST15 and ST16, PP3</i>)
Examine the extent to which the program is using performance measurement to provide management with assurance that the program is meeting its objectives.	Performance indicators have been established for the program, which are periodically measured and reported on to provide management with assurance that the program is meeting its objectives.	Audit Criteria related to the Management Accountability Framework (<i>Office of the Comptroller General, 2011, Sections RP1-RP3, G6</i>)

9 AUDIT TEAM

Chief Audit Executive: Phat Do
Internal Audit Principal: John-Patrick Moore
Senior Internal Auditor: Alice Hanlon

Consultant: PricewaterhouseCoopers