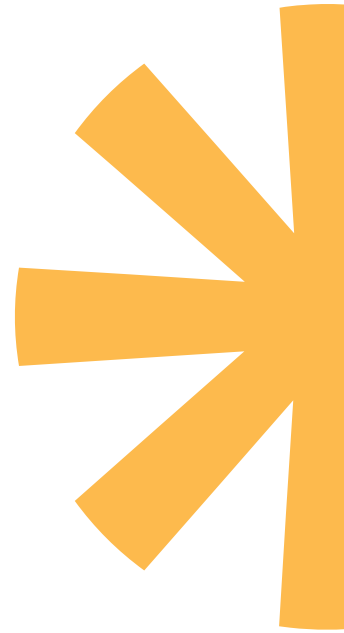


CANADIAN FORUM for SOCIAL INNOVATION 2024

A ROADMAP FOR CANADA'S
INNOVATION ECOSYSTEM



WORKBOOK

**Vision & Backcasting
Workshop #4**

MAY 28th 2024, CALGARY



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WORKSHOP HOSTS CALGARY



ADVISORY COMMITTEE

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FORUM PARTNERS 2024



AGENDA 28 MAY 2024

LOCATION: UNIVERSITY OF CALGARY MAIN CAMPUS, PROFESSIONAL FACULTIES BUILDING, FACULTY OF NURSING, ROOM 4220 (FOURTH FLOOR)

12:30-1:00	Networking Lunch
1:30-2:00	Roadmap map for Canada's Innovation Workshop Part 1: Vision
2:00-2:45	Goals and Milestones Round 1
2:45-3:00	Pause
3:00-3:45	Goals and Milestones Round 2
3:45-4:15	Discussion
4:15-4:30	Summary and Farewells

PARTICIPANTS

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Sandra Lapointe, McMaster University
Erin Kaipainen, University of Calgary
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VISIONING AND BACKCASTING PROCESS

On 12-13 October 2022, 125 stakeholders from higher education, the social sector, the municipal sector, national policy, and community nonprofits met at McMaster University for a series of catalyst roundtables, deliberative dialogues, and concertation workshops. The purpose was to determine zones of agreement and explore key actions for the purpose of creating alignment on policies and practices that embrace impact-first training and knowledge mobilization to build capacity for innovation in the social and municipal sectors. The results were shared in the form of a [Consensus Report](#).

Building on this emerging consensus, over the last couple of years with the support of our team at The/La Collaborative, the Canadian Forum for Social Innovation collected a wealth of additional evidence (focus groups, sense-making, literature review, surveys, inventories) to articulate the challenge.

With the support of valued partners, the guidance of its advisory committee, and the stewardship of McMaster University's Social Innovation and Action Lab, the Canadian Forum for Social Innovation is now gearing up for the third phase of the project: a national dialogue that will leverage prospective co-design and backcasting methodologies to generate a Roadmap for Canada's Innovation Ecosystem. Four workshops will

take place in April and May 2024 in Toronto, Ottawa, Montréal and Calgary, and the exercise will culminate with the second edition of the Canadian Forum for Social Innovation in Montréal on 11-12 June 2024.



This **WORKBOOK** presents a vision, goals, and milestones that emerge from the evidence we have gathered so far. The pre-Forum deliberative workshops in Toronto, Ottawa/Wakefield, Montréal, and **Calgary** will collect your input to finalise problem structuration and vision building (step 2). They will also help fine-tune the proposed milestones that will be used to set the agenda (step 3), i.e. create the roadmap for Canada’s innovation ecosystem at the Forum in Montreal on 11-12 June. As with all work in the social innovation space, the codesign process is iterative and our strategy is emergent.

PREPARING FOR THE WORKSHOP

There are 3 components to the discussion for which we invite you to prepare. Each section lays out the information on which your input will be invited.

Section 1: The vision for Canada’s innovation ecosystem 2040 that will be at the core of the deliberative workshop. At the workshop, you will be invited to provide input on the framing, scope, and focus.

Section 2: The list of proposed milestones and the main goals around which the vision for 2040 is articulated.

Section 3: The foreseeable challenges to realising the vision for 2040. At the workshop, you will be invited to identify challenges that may impede the realisation of some of the milestones.

Please review each section in advance of the workshop. You are welcome to make notes and bring them to the workshop, but you are not required to do so. The deliberation is a crucial part of the process, and the exercise aims to ensure that we learn from each other and come to a shared vision through iterative reflection and dialogue.

1 VISION

IN 2040, Canada has the strategies, policies, and programs to mobilize knowledge and talent across disciplines and sectors. Capacity for innovation extends to all zones of impact: economy, policy, society and system transition. The fully connected innovation ecosystem thrives on inclusion, equity, and sustainability. Universities and colleges are an integral part of social, cultural, environmental and economic prosperity and place-based innovation and they work with expert practitioners across sectors to produce the full breadth of talent needed, and federal and provincial research funding programs intentionally support higher education's impact strategy. The country is outperforming on all innovation, economic and societal well-being indices in all zones of impact.

GOAL 1. An Extensive Strategy Supporting All Innovation Equally, Across All Zones of Impact. In 2040, the Canadian research and higher education systems are supported by an innovation strategy and policies that places society at the core of their models and are designed to serve communities and people. Knowledge and skills mobilization is intentional and responsive to change in every zones of impact, and public funding of innovation fosters overarching prosperity: social, cultural, environmental and economic.

GOAL 2. Skills and Talent Across Innovation Ecosystems. In 2040, Canadian innovation ecosystems benefit from the diversity, agility, and multidisciplinary of emerging talent. Universities and colleges each play their unique role in generating the skills and expertise that bolster inclusive innovation, and training programs benefits from trust-based, long-term partnerships with employers across all zones of impact.

GOAL 3. Infrastructure and Capacity for Connectivity Across Innovation Ecosystems. In 2040, infrastructures (physical, digital, relational) are in place within and between universities, colleges, industry, social sector and public sector to ensure that the full breadth of innovation processes are adequately supported. Innovation is enabled by intentional ecosystem capacity building and transition mediation strategies in all zones of impact.

2 Goals and Milestones

INSTRUCTIONS

Below are the 3 goals around which the vision for 2040 is articulated, and the associated list of proposed milestones.

A milestone is an intermediate step between the starting point and the vision for 2040. It refers to a state of affairs specific at a specific moment in time, not to a process that takes place over a period.

At the workshop you will be invited to identify the milestones that you would like to see modified or amended, as well as one or two that you think are missing.

Goal 1. An Extensive Strategy Supporting All Innovation Equally, Across All Zones of Impact

In 2040, the Canadian research and higher education systems are supported by an innovation strategy and policies that places society at the core of their models and are designed to serve communities and people. Knowledge and skills mobilization is intentional and responsive to change in every zones of impact, and public funding of innovation fosters overarching prosperity: social, cultural, environmental and economic.

MILESTONES	YOUR INPUT
1. Through horizontal structuring, federal, provincial and municipal innovation strategies, policies and programs are co-created to operationalise and reconcile the principles of equitable, sustainable innovation and transitions.	
2. Intentional actions focused on skills-building, skills mobility and ecosystem connectivity are providing stakeholders across all sectors with inclusive and equitable access to knowledge and technology they need.	
3. Decolonization is a core principle and vector for innovation strategies, policies and programs and Canada’s research enterprise fully integrates Indigenous and other ways of knowing.	
4. Federal, provincial and municipal innovation strategies rests on a high levels of collaboration and innovation literacy: stakeholders understand the processes that lead to innovation at the various zones of impact, and dedicated support is adequate.	
5. Incentives for research, development and innovation (e.g. tax credit equivalents, loan forgiveness) have been extended to all zones of impact and fully embrace the diversity of approaches and contexts.	
6. Science-advice is involved in all public decision-making, and is supported by nation-wide knowledge networks and place-based campus-community partnerships	
7. Frameworks guiding action for social, cultural, environmental and economic prosperity are available in all sectors and reflect the diversity of pathways to innovation in all its forms.	
8. Federal government (e.g. Statistics Canada) uses frameworks to ensure accountability, and to assess social, cultural, environmental and economic impact that reflect the complexity of innovation ecosystems in all zones of impact.	
9. New financial instruments (e.g. social finance) are used to redirect the flow of resources and increase regeneration, growth, productivity and prosperity across all zones of impact.	
10. Research infrastructures support and create spaces for indigenous involvement that make practice genuinely inclusive and equitable.	
11. Academic cultures embrace interdisciplinary and collaborative scholarly practices to bolster innovation in all zones of impact.	

12. Universities and colleges adopt and obligation of impact policy and create incentives and rewards (e.g. criteria that guide their merit review and hiring processes) to increase their contribution to community impact and innovation.
13. Support for Universities' impact mission is institutionalised and accordingly reflected in all practices around hiring, recognition and reward.
14. Canadian universities and colleges generate the highly qualified talent that Canada needs across all zones of impact.
15. The principles underpinning the San Francisco Declaration on Research Assessment (DORA) are incorporated in all aspects of impact assessment in research.
16. Social sector and community needs around knowledge flow and innovation are clearly identified and a purposeful division of labour between universities and colleges is reflected in federal and provincial support of dedicated research and knowledge mobilization funding programs.
17. Indigenous-led initiatives and strategies are an integral part of the innovation ecosystem, and measures are in place to financially and logistically support the creation of such initiatives.
18. Federal innovation strategy and support system for knowledge and science is informed by a solid understanding of the balance between investigator-led and mission-driven research, and the importance of place-based innovation in all zones of impact.
19. Models of "resources flow" for innovation used by policymakers foster place-based innovation and take into account investment and impact in all zones of impact.
20. Innovation infrastructure have been planned to have the flexibility to support innovation at every stage and to be adaptable in emergent reality.
21. Federal and provincial funding programs are designed to foster inclusive and diverse interdisciplinary and cross-sectoral cultures in which excellence and high levels of social and economic accountability bolster innovation across all zones of impact.
22. Universities and colleges' impact strategy is aligned with federal, provincial and municipal commitment to sustainable development goals.

What did we miss?

Goal 2. Skills and Talent Across Innovation Ecosystems.

In 2040, Canadian innovation ecosystems benefit from the diversity, agility, and multidisciplinary of emerging talent. Universities and colleges each play their unique role in generating the skills and expertise that bolster inclusive innovation, and training programs benefits from trust-based, long-term partnerships with employers across all zones of impact.

MILESTONES	YOUR INPUT
1. Diverse, highly qualified talent that harnesses the benefits of interdisciplinary, cross-sectoral training is intentionally deployed across the innovation ecosystem to create social, cultural, environmental and economic prosperity.	
2. Policies and programs are in place to bolster the role of talent in all sectors of activity, and fuel an ecosystem in which people- and community-focused investment boost equitable, sustainable social, cultural, environmental and economic prosperity.	
3. An intentional approach guides inclusive access to university and college-level education and is bolstered by fully enabled primary and secondary education systems driven by equity and inclusiveness for vulnerable and Indigenous youth.	
4. Funding models for universities and colleges drive interdisciplinarity, inclusivity and equity in a decolonial context.	
5. Those holding university and colleges degrees find employment across the ecosystem where they can apply knowledge-based and practical skills they acquired through training toward inclusive and collaborative innovation.	
6. Incentives exist for employers to create jobs, hire, foster (e.g. through experiential learning) and retain talent for innovation in all sectors, including community nonprofits.	
7. The specific needs for innovation-driving talent and knowledge in each zone of impact have been identified and the division of labour between universities, colleges and employers to meet these various needs is intentional and complementary.	
8. Universities, colleges and employers are structuring collaborations around experiential learning and mutualizing needs and assets to bolster talent in all zones of impact.	

9. Colleges and universities offer programming to generate interdisciplinary talent for complex societal challenges that require both enabling technologies and human, social and environmental knowledge.
10. Colleges and universities offer programming to support connectivity and interdisciplinarity needed to address complexity and systemic issues.
11. Graduate training yields talent for both academic and non-academic employment in all zones of impact.
12. Social, cultural, environmental and economic impact and innovation literacy is an explicit aspect of talent building in relevant fields of study.
13. Higher education institutions offer both foundational skills training and specialised training programs to support interdisciplinarity and inclusive collaboration at all stages of innovation processes.
14. Design-, Ideas- and Living Labs in all zones of impact have the resources to contribute to talent-building for innovation (e.g. through experiential learning).
15. Employers in all zones of impact have access to financial resources and have the capacity to support impact and innovation-focused experiential and work-integrated learning.

What did we miss?

Goal 3. Capacity and Infrastructure for Connectivity Across Innovation Ecosystems.

In 2040, infrastructures (physical, digital, relational) are in place within and between universities, colleges, industry, social sector and public sector to ensure that the full breadth of innovation processes are adequately supported. Innovation is enabled by intentional ecosystem capacity building and transition mediation strategies in all zones of impact.

MILESTONES	YOUR INPUT
1. Concerted federal, provincial and municipal policies support “place-based” innovation and impact and intentionally bolster community-level prosperity.	
2. Universities and colleges are anchor institutions that support place-based innovation in all zones of impact.	
3. Stakeholders’ clear understanding of their mutual and reciprocal roles in innovation is leading to new types of equity-focused knowledge partnerships.	
4. Federal, provincial and municipal governments use concerted, principled horizontal and multi-level frameworks, guidelines and policies to streamline cooperation and bolster innovation in all zones of impact.	
5. Canada has the infrastructure to support agile, equitable, evidence-based response to challenges and opportunities in all zones of impact.	
6. Innovation infrastructure is designed to accommodate complexity and emergence in innovation ecosystems and support extends to intersectoral platforms for innovation partnerships and collective action.	
7. Innovation partnerships involving higher education institutions rest on asset-based approaches to collaboration and co-governance models that fully value non-academic expertise in all zones of impact.	
8. Universities and colleges’ strategies to build and mobilize talent and knowledge are guided by the principles of inclusive collective action and foster prosperity locally, nationally, and globally.	
9. Communities benefit from asset-based, reciprocal relationships with higher education institutions and they share talent and knowledge to support place-based research and innovation.	
10. Innovation infrastructure is structured to increase the flow of talent and knowledge between higher education institutions and communities and support cross-sectoral collaborations in all zones of impact	

- 11. Intermediary organisations (e.g. knowledge mobilization, tech transfer, work placement) whose role is to streamline access to talent and knowledge/expertise offer programming tailored to needs in every zones of impact.
- 12. Indigenous and other ways of knowing are valued and dedicated infrastructure generates innovation in all zones of impact.
- 13. The human and financial costs of connectivity are explicitly factored into infrastructural project development, grant funding and investment for all innovation partners in all zones of impact.
- 14. Public and private funding, resources and frameworks are available to build capacity for inclusivity, equity and decolonisation in innovation partnerships in all zones of impact.
- 15. Infrastructure in all zones of impact supports interdisciplinarity and inclusive collaboration at all stages of innovation processes, from design to implementation.
- 16. Connectivity and resource flows between government and social, cultural, environmental and economic stakeholders rests on high levels of capacity to conceptualise systems dynamics and complexity in each zones of impact.
- 17. Design-, ideas- and living lab approaches to systems dynamics and complexity enable place-based innovation and sociotechnical transitions.

What did we miss?



GLOSSARY

Capacity: The ability of an organization to perform work, or the level of an organization's capability to deliver services, programs, and products as part of fulfilling its mandate or mission.

Connectivity: a feature of a system that allows for knowledge, expertise and resources to flow; connectivity is multilayered and multifaceted. It bridges organisations across all sectors in an innovation ecosystem and affects all zones of impact.

EDI: An abbreviation for: 'equity, diversity and inclusion'.

Experiential Learning: The acquisition of knowledge and skills through practice and upon reflection of a period of engagement, observation, and/or immersion. 'Experiential learning' and 'work-integrated learning' are often used interchangeably. An experiential-learning partnership is a community-based collaboration between an organization and a higher education institution that revolves around the hosting, facilitating, and supporting of one or more students involved, for instance, in program, service, or project delivery.

Highly qualified personnel (HQP) : In this context, HQP refers to those having received advanced training in any academic discipline, or having acquired equivalent experience in applied contexts. HQP is associated with technical and specialised skills, but innovation also requires high levels of translational skills typically associated with critical thinking, problem solving, creativity and intercultural competences, for instance.

Innovation Process: A series of actions or steps designed to create, improve, or implement ways of doing, framing, knowing, or thinking, intended to create new value.

Innovation: innovation is the outcome of knowledge use: at the most general level, what leads to innovation is a series of actions or steps designed to create, improve, apply, or implement knowledge, research, evidence, and/or expertise to new ways of doing, framing, knowing, or thinking, and intended to create new value.

Innovation ecosystem: The multilayered and multifaceted collection of interconnected institutions and organizations through which the resources, talent, and information that support, interact with, and affect innovation flow.

Knowledge Mobilization: Knowledge mobilization is an umbrella term encompassing a wide range of activities relating to the production and use of research results, including knowledge synthesis, dissemination, transfer, exchange, and co-creation or co-production by researchers and knowledge users (source: SSHRC). In practice, it overlaps in substantial ways with other types of activities traditionally associated with teaching and learning, such as service learning and experiential learning (see, Methodology: Charting, infra). SSHA: Social Sciences, Humanities, and Arts disciplines. Statistics Canada groups all non-STEM disciplines together: Business, Humanities, Health, Arts, Social science, and Education (BHASE).

Research and Development (R&D): The planned creative work aimed at new knowledge or developing new and significantly improved goods, programs, and services. This includes both basic research and applied

research and development; the latter is the use of research and practical experience to produce new or significantly improved goods, programs, services, or processes.

Resilience: The ability to effectively respond to and adapt to systemic change, seeking a balance of social, environmental, and economic needs.

Skill: An aptitude, competency, or ability broadly construed.

- Foundational skill: A broad range of abilities and knowledge understood to be essential to employability and citizenship, and generally associated with social and emotional intelligence as well as cognitive literacy. They include critical thinking, problem-solving, creativity, self-management, intercultural competence, and effective communication.
- Technical skill: a domain-specific skill that is usually associated with applied training.

Social enterprise: A business model with the dual focus of social (and/or environmental) and economic gain.

Social finance: any type of financial service that utilizes private funds to support social goals, address social problems, and/or facilitate social change. According to Economic and Social Development Canada, social finance is the practice of making investments intended to create social or environmental impact in addition to financial returns.

Social impact: is predicated on specific activities or outputs (e.g. programs, services) and their outcomes. An organization's social impact is the measurable outcome of its products, programs, services, etc. that are created and delivered to address a specific social need.

Social innovation: The phrase "social innovation" is used in multiple contexts to refer to new ideas, services, processes, or frameworks intended to meet social needs or create impact for the public benefit as well as those involved in addressing wicked problems that are rooted in systemic issues. Here we make a distinction between **innovation for social impact** in the social sector that follows traditional logics and **innovation for social transformation**, which targets systemic societal issues.

Social transformation: is a matter of collective, intentional, systems-level change. Social transformation is an intentional process through which transformational change is effected across social systems to address emerging social crises and global challenges. Social innovation happens as a result of coordinating the actions of multiple stakeholders in a system toward a collective goal.

Social research and development (social R&D): Evidence-based methods and practices intended to acquire, absorb, and/or utilize knowledge, often to create or improve processes, products, and/or services in the social sector.

Social sector: An umbrella term denoting the activities of organizations that identify with and operate for the public benefit, including co-operatives, non-profits, registered charities, social enterprises/B corporations, or unincorporated grassroots or community groups. It is sometimes referred to as the "third sector", in contrast to what has traditionally been labeled the private and public sectors. Recently, the emergence of "social enterprise", i.e., a for-profit business model embracing social and/or environmental goals, has made traditional boundaries between sectors in mixed economies more porous.

Talent: see highly qualified personnel (HQP)

Zones of Impact: Knowledge use and research practices are shaped by the specific knowledge needs of specific knowledge users across the innovation ecosystem. Knowledge creation and use happens in

broad and overlapping “zones of innovation and/or impact”. The framework proposed here was initially used to organise evidence generated through a review of the literature guided by the following questions:

- * What processes underpin knowledge use at the science-society interface?
- * What are the barriers to knowledge use and/or innovation in the different zones of impact at the science-society interface?
- * What are the drivers of knowledge use and/or innovation in the different zones of impact at the science-society interface?
- * What skillsets and know-how are required of individuals working in the different zones of impact at the science-society interface to support these processes?

The processes involved in ensuring that the relevant knowledge is properly used by the right people to produce the desired impact and innovation is examined in [Skills for Inclusive and Collaborative Innovation](#) (Discussion Paper by Lapointe and Propst 2023)

ZONES OF IMPACT	
Economy	Universities, colleges, governments, and industry cooperate to create technology-driven economic growth. Research generates new ideas, and innovation is typically the result of “commercialization”, “technology transfer”, and similar activities that benefit from the support of industry liaisons and technology transfer offices who act as intermediaries to push out research and pull in investment partners.
Policy	Knowledge and expertise needed for policy making may extend to any aspect of HEI-based research and is increasingly expected to incorporate lived experience and stakeholder input. The co-creation processes through which knowledge is intentionally mobilized for policy making often takes the form of “evidence-support” and “knowledge exchange” deliberation.
Social Sector	The social sector includes all organisations whose purpose is defined in connection to societal well-being. Knowledge mobilisation in the social sector generally aims at supporting practitioners (e.g. medical practitioners, educators, social services providers) by ensuring that they have access to the most recent research in the relevant fields: social, ethical, cultural, legal, educational, and medical. Partnerships between HEIs and social sector organisations also revolved around other types of “community-engagement” activities. At the level of communities, knowledge needs of social sector organisations and municipal governments often overlap.
Social Transition	Social transformation is an intentional process through which systemic change is effected to address emerging social crises, wicked issues, and global challenges. Social transformation happens as a result of coordinating the actions of multiple stakeholders (industry, society, economy and policy) toward a collective goal. For this reason, social transformation revolves around processes that involve the co-design and co-creation of solutions such as those applied in community-based innovation-, design-, or living “labs”.

