%TRIUMF

Shaping the Future of TRIUMF + the Process and Timeline for the Next Five-Year Plan (2025-2030)

Nigel Smith & Sean Lee



Agenda

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- Processes and Timelines

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Context

Our Vision is for Canada to lead in science, discovery, and innovation, improving lives and building a better world.





Our Mission is to serve as Canada's particle accelerator centre.

We advance isotope science and technology, both fundamental and applied.

We collaborate across communities and disciplines, from nuclear and particle physics to the life and materials sciences.

We discover and innovate, inspire and educate, creating knowledge and opportunity for all.

Values

Safety & Accountability

- We respect the health and safety of our workers, our visitors, and our neighbours
- We build quality into our processes and seek continual improvement in all of our systems
- We embrace transparency and authenticity, and hold ourselves and each other accountable

Excellence & Integrity

- We have a passion for excellence in all that we do
- We are decisive, bold, courageous, and compassionate
- We take responsibility for our actions, our commitments, and our contributions to the larger community

Equity & Inclusion

- We empower our workforce and foster an inclusive work environment, enriching our science and our community
- We value teamwork and open communication to ensure that everyone belongs and all voices are heard
- We respect each other, take care of each other, and support the success of all



Research Areas

TRIUMF's suite of program was last reviewed in 2018 in the context of the current Five-Year Plan and drives our current priorities:



Expanding the boundaries of human knowledge



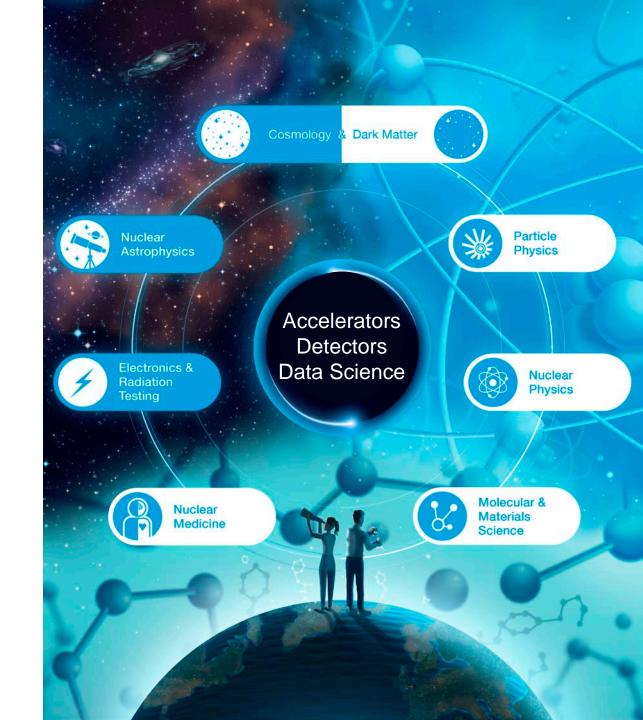
Advancing the treatment of critical diseases



Developing new technologies and innovations



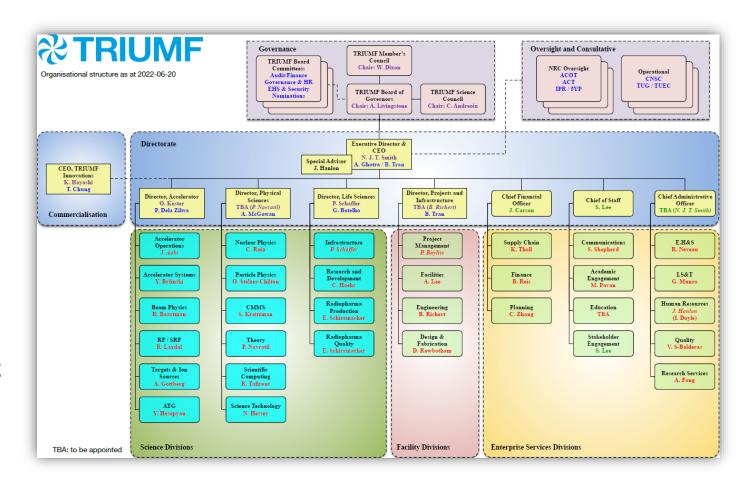
Deepening our understanding of the natural world



New Paradigms

Since the last Five-Year Plan was developed, there have been several major changes to TRIUMF's operating paradigm. Some have been choices, while others have been mandated:

- Governance model
- Legal structure
- Leadership
- Additional operational oversight
 - Funders
 - Regulators
 - Governance bodies
- Organizational structure



Current Project & Priorities

The current Five-Year Plan has TRIUMF committed in a number of key projects – many of which will not be completed by 2025 and will carry over into the next Plan. Examples include:

Ongoing major projects

- ARIEL
- IAMI
- Core infrastructure renewal projects
- Major collaboration support, including:
 - ATLAS
 - HL-LHC
 - Hyper-K
 - UCN
 - nEXO

Expected lab commitments

- BL1A
- Darklight and THz

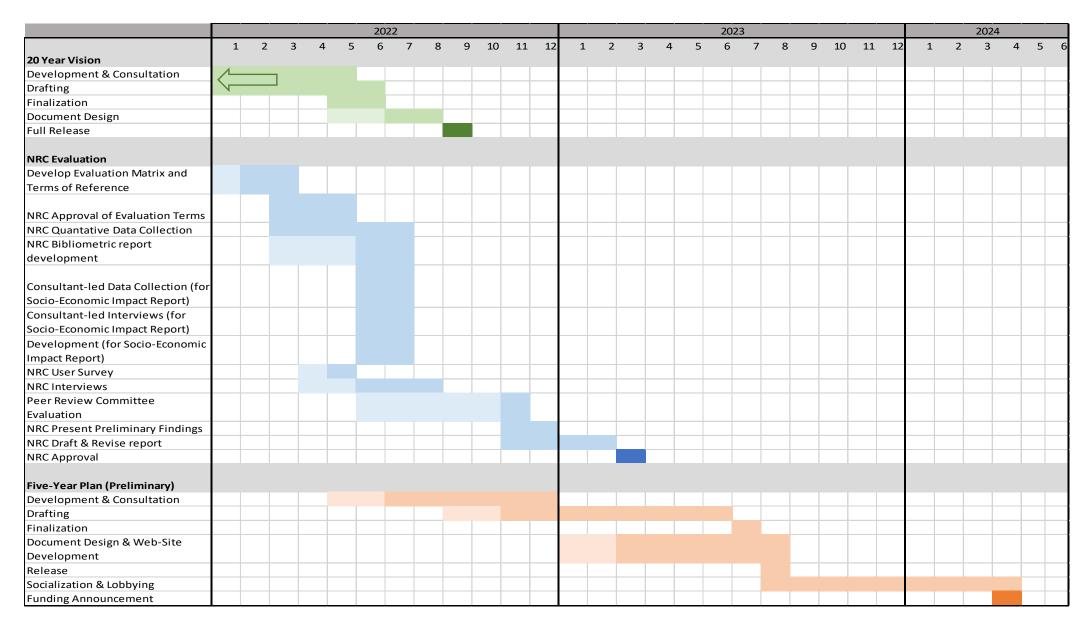




Strategic Planning Cycle



Processes & Timelines



20-Year Vision

Background & Objectives

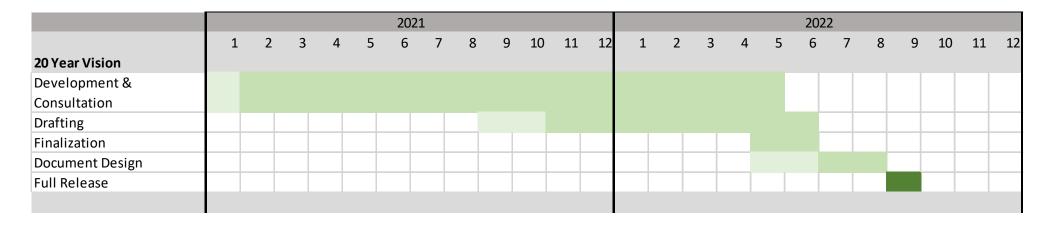
Traditionally, TRIUMF's strategic planning has taken place in five-year increments, aligning with the laboratory's funding cycle. In the shadow of TRIUMF's 50th anniversary, it was noted that a longer-term process would be prudent.

In fact, the 2018 International Peer Review Committee (PRC) noted that "to achieve TRIUMF's full promise, the leadership of TRIUMF should develop and take action to achieve an even longer-term vision, looking out 20 years or more".

Taking this guidance to heart, TRIUMF committed to the development of a long-term vision, not only for its own benefit, but to demonstrate to member universities, government funders, and partners, the impact and value TRIUMF can have in the decades to come.

Background & Objectives

In early 2021, the process to develop TRIUMF's inaugural 20-Year Vision officially began. This effort was centered on mapping out TRIUMF's long-term goals and objectives. The resulting document was intended to be bold and aspirational, but also realistic and achievable.



The entire process has spanned nearly two years; it involved a comprehensive three phase process that encompassed internal planning, expert and community consultation, significant discussion and feedback, and ultimately, Board approval.

Background & Objectives

Beginning with Five-Year Plan 2020-2025 as the starting point – alongside the Mission, Vision, and Values of the laboratory (all of which we reaffirmed in 2018) – we worked with the community to project the TRIUMF's ambitions 20 years into the future.

Objective: To produce a high-level Vision document; the release was originally projected to come at the end of 2021, but this was later extended to summer/fall 2022.

Purpose:

- To articulate TRIUMF's purpose and ambitions for future accomplishments
- To position TRIUMF in the national and international science ecosystems
- To guide the development of the next Five-Year Plan

Target Audiences:

- TRIUMF's research communities
- Academic stakeholders (Members institutions, university presidents, etc.)
- Government funders and related departments/agencies
- Prospective partners and collaborators
- General public

Phase 1: Visioning and listening (Fall 2020 – Summer 2021)

 A broad spectrum of stakeholders were engaged to capture the full diversity of ideas and perspectives of our community

Phase 2: Convergence on vision framework (Summer 2021 – Winter 2022)

 Based on the input and ideas received, the high-level pillars of the Vision were developed and refined via feedback and consultation

Phase 3: Finalization (Spring/Summer 2022)

 The 20-year Vision document was drafted, refined, and the final text was approved by the TRIUMF Board of Governors

Phase 1: The process began with the development of a planning and consultative framework which resulted in the creation of a planning group and a Steering Committee – with the latter composed of experts from TRIUMF's communities, member universities, government funders, and international partners.

This phase saw the creation of 12 topical groups (each with 5-10 members both internal and external to TRIUMF) who worked to address 6 guiding questions. This work, in addition to community consultation done via the ThoughtExchange platform, was compiled into a publicly accessible <u>report</u> and <u>summary presentation</u> that were used to advance the vision and may be leveraged further for the Five-Year Plan process.

Phase 1 Top	oical Groups
Nuclear Physics	Scientific Computing
Particle Physics	Emerging trends in Convergence Research
Fundamental Physics with AMO techniques	Accelerator Sciences and Facilities
Life Sciences	TRIUMF Site Development
Probes for Quantum Materials and Biomolecules	People and Skills
Quantum Technologies	Innovation & Collaboration

Phase 1 Guiding Questions													
What is TRIUMF today?	What will TRIUMF have accomplished?												
What trends and changes will shape TRIUMF's future?	What will TRIUMF be doing and what will TRIUMF not be doing anymore?												
What will TRIUMF be?	What will TRIUMF look like?												

Phase 2: With the input collected in Phase 1, the next set of actions involved collating the ideas and translating them into draft text for review and feedback. This effort resulted in the production of the high-level positioning statements (and supporting content) shared at Science Week 2021.

High-level Positioning Statements (Summer/Fall 2021)

- 1. As Canada's particle accelerator centre and radioisotope hub for science, medicine, and industry, TRIUMF delivers world-class fundamental and use-inspired research for societal benefit.
- 2. TRIUMF is recognized and leveraged as a strategic Canadian asset with unique infrastructure, expertise, and capabilities, to not only answer the biggest scientific questions, but also to address global societal challenges through convergence research, and enable Canada to react rapidly to emerging national needs.
- 3. TRIUMF is a catalyst for and a key player in Canada's coordinated Big Science enterprise that delivers world-class science and innovation through large scale infrastructure and secures our domestic capability to address complex challenges.



Phase 3: Beginning in 2022, five major themes of the Vision were drafted and revised with support from the Steering Committee, the Board of Governors, the Science and Members' Councils, and community feedback. These five themes make up the foundation of the 20-Year Vision document, which was iterated upon in spring 2022 following substantial stakeholder feedback.

The final text of the Vision was approved by the TRIUMF Board in June 2022.

- A global leader in discovery science, delivering breakthroughs that unlock the deepest mysteries of the universe: Strengthening Canada's leadership in groundbreaking particle and nuclear physics
- 2. A world-class accelerator centre driving use-inspired research from the life sciences to quantum and green technologies:

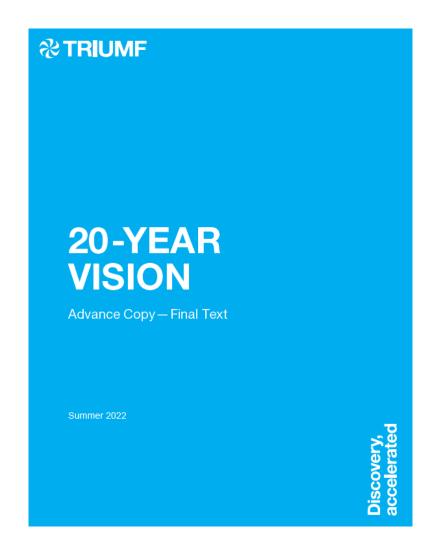
 Leveraging our unique infrastructure to pursue research in Canada that will

change the world

- 3. An inclusive multidisciplinary talent incubator, attracting and developing the best people from around the world: Producing Canada's future science leaders and innovators
- 4. A leader in a flourishing national Big
 Science ecosystem:
 Catalyzing the success and growth
 of Canada's network of major research
 facilities
- 5. A national innovation hub translating discovery science into health and sustainability solutions:

 Responding pimbly to complex society.
 - Responding nimbly to complex societal challenges for the benefit of Canadians

Release, Impact & Renewal



The final, Board-approved text of the inaugural 20-Year Vision is available now on the TRIUMF.ca website as an advanced copy; a copy will also be uploaded to the Science Week Indico page.

This advanced copy contains the final text of the Vision; however, it does not yet include visuals and other design elements that will come with the official release.

The full release of the 20-Year Vision is expected to be available in September 2022; both print and digital versions will be available around this window.

Release, Impact & Renewal

As already noted, the 20-Year Vision will play a significant role in shaping the direction for the upcoming Five-Year Plan.

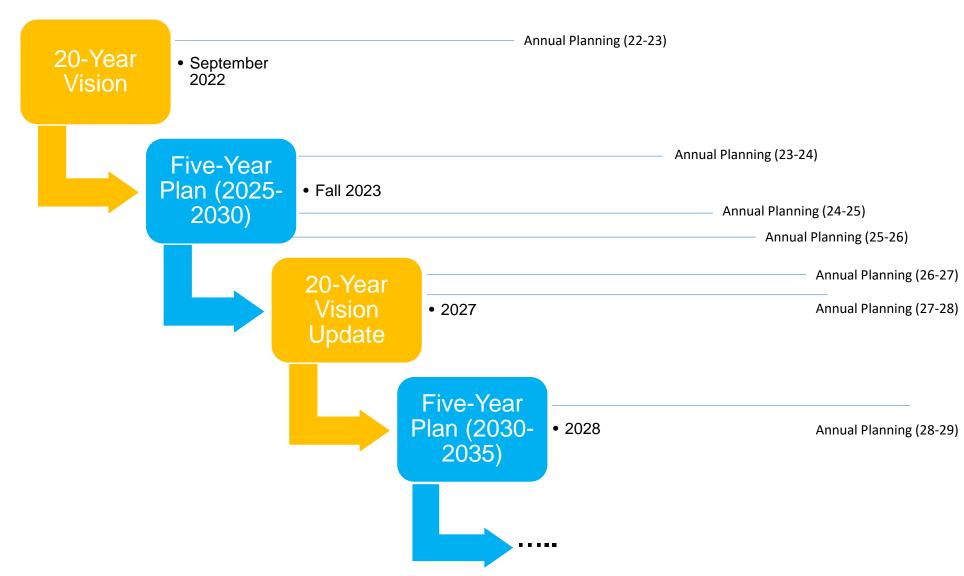
The 20-Year Vision lays out the long-term priorities for the laboratory, and Five-Year Plan 2025 – 2030 will mark the first effort to lay the groundwork to achieve this.

The five-year planning process is significantly more advanced than it was at this time in the last cycle. With the long-term goals already set, we will leverage the work already done for the Vision – supported by the projects and priorities already underway – to chart a realistic set of objectives for the five-year period.

Release, Impact & Renewal

This graphic envisions the planned critical path from the inaugural 20-Year Vision to the next Five-Year

Plan and beyond.



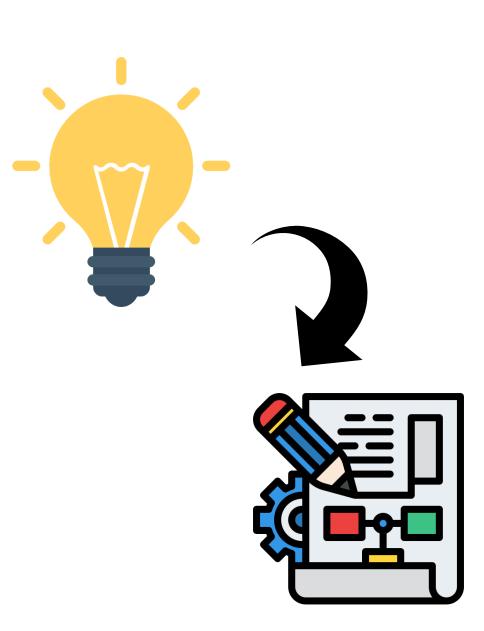
Five-Year Plan 2025 - 2030

Delivering on the Vision

With the 20-Year Vision now at TRIUMF's disposal, this new Five-Year Plan will take on a slightly different role than past documents.

No longer required to simultaneously roll-up both a high-level strategic vision and specific short-term deliverables, Five-Year Plan 2025 – 2030 will serve to be a focused document laying out tangible actions to begin operationalizing the Vision.

The exact format of the plan/plans has not yet been determined.



Preliminary Timeline

With the 20-Year Vision now complete, and the NRC Evaluation (covering the last five-year period) currently underway, work on Five-Year Plan 2025 – 2030 is now beginning, with inital preparations having begun in the spring.

		2022														2023													2024											
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Five-Year Plan																																								
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Science Week 2022

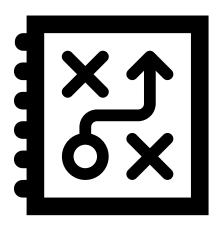
Building on ideas from the 20-Year Vision topical groups, as well as evolving discussions within TRIUMF's groups and divisions, Science Week 2022 serves as the kick-off for the development; the expected gestation of the Plan to be ~ one year, as socialization with government is scheduled to begin in fall 2023.

Processes & Inputs

Supported by the inputs of the 20-Year Vision (as well as the research and the materials generated in support of the Vision), the plans and priorities of our national and international communities, and the commitments already made (including ARIEL, IAMI, and other major CFI and NSERC projects), many of the objectives of the next Five-Year Plan are already clear.

The work over the next year will be to collate the various inputs and ideas and shape them into a cohesive strategy that is both actionable and can garner the required support from our community, Members, external collaborators, and government funders.

With our new governance structure, Five-Year Plan development will be driven by TRIUMF's Leadership Team, endorsed by the Board (on the advice of Science Council), and ultimately approved by the Members' Council.





Processes & Inputs

Beginning this week, TRIUMF's science and research divisions will share where they are with their initial ideation around what can be accomplished over the next five-year cycle.

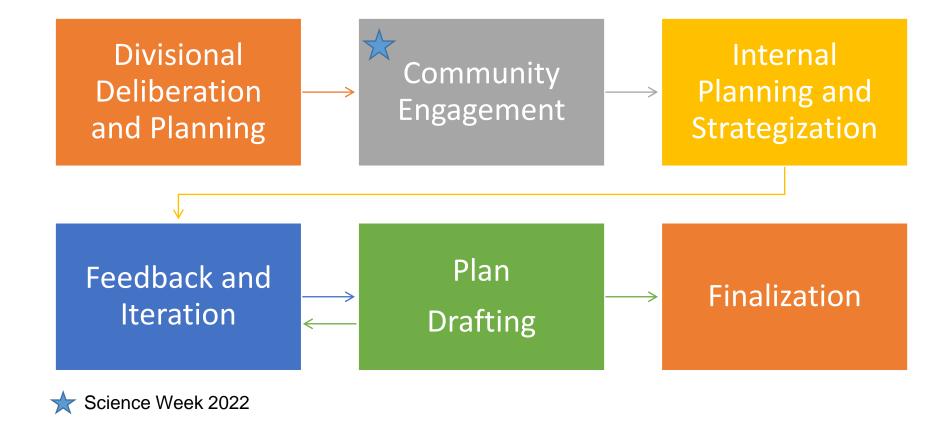
The feedback gathered here at Science Week will evolve our efforts and lead to future rounds of iteration, which will then be refined through input received from TRIUMF's various oversight, advisory, and governance bodies (NRC Evaluation and Peer Review Committee*, TRIUMF Board, Science Council, Members' Council, ACOT, etc.).

Furthermore, given the inputs and feedback channels that already exists, a formal "expression of interest" process is not anticipated to be used in this planning cycle. Any updates or further changes to the process will be communicated through TRIUMF's standard channels (web site, site-wide emails, newsletters, etc.).

^{*} The NRC Evaluation and PRC come a year earlier than in the last cycle, allowing us the opportunity to better integrate the outcomes and feedback from this process into our planning for the Five-Year Plan.

Critical Path

Although details must still be confirmed, the following is a provisional mapping of the critical path for "development and consultation" and "drafting" stages in TRIUMF's Five-Year Plan timeline.



Questions?

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Thank You! Merci!

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