

**UNIVERSITY OF WATERLOO
SENATE LONG RANGE PLANNING COMMITTEE
NOTICE OF MEETING**

DATE: Thursday 29 September 2022
TIME: 10:30 a.m. – 12 noon
PLACE: NH 3318

Chair – J. Rush

AGENDA

<u>Item</u>	<u>Action</u>
1. Declarations of Conflict of Interest a. Excerpt from Bylaw 1, section 8*	Information
2. Minutes of 13 May 2022* and Business Arising	Decision
3. Waterloo at 100 Visioning – continued from 13 May 2022; item 3 (Goel)*	Input/Discussion
4. Digital Learning Strategy (Caputo and Wandel)	Input/Discussion
5. Other Business	Information
6. Next Meeting: Thursday 27 October 2022 from 10:30 a.m. – 12:00 p.m.; NH 3318	Information

* material attached

23 September 2022

Sarah Willey-Thomas
Associate University Secretary

Excerpt from Senate Bylaw 1

8. Declarations of conflict of interest

8.01	At the beginning of each meeting of Senate or any of Senate's committees or councils, the chair will call for members to declare any conflicts of interest with regard to any agenda item. For agenda items to be discussed in closed session, the chair will call for declarations of conflict of interest at the beginning of the closed portion of the meeting. Members may nonetheless declare conflicts at any time during a meeting.
8.02	A member shall be considered to have an actual, perceived or potential conflict of interest, when the opportunity exists for the member to use confidential information gained as a member of Senate, or any of Senate's committees or councils, for the personal profit or advantage of any person, or use the authority, knowledge or influence of the Senate, or a committee or council thereof, to further her/his personal, familial or corporate interests or the interests of an employee of the university with whom the member has a marital, familial or sexual relationship.
8.03	Members who declare conflicts of interest shall not enter into debate nor vote upon the specified item upon which they have declared a conflict of interest. The chair will determine whether it is appropriate for said member to remove themselves from the meeting for the duration of debate on the specified item(s).
8.04	Where Senate or a committee or council of Senate is of the opinion that a conflict of interest exists that has not been declared, the body may declare by a resolution carried by two-thirds of its members present at the meeting that a conflict of interest exists and a member thus found to be in conflict shall not enter into debate on the specified item upon which they have declared a conflict of interest. The chair will determine whether it is appropriate for said member to remove themselves from the meeting for the duration of debate on the specified item(s).

University of Waterloo
SENATE LONG RANGE PLANNING COMMITTEE
Minutes of the meeting held 13 May 2022
[in agenda order]

Present: Jean Andrey, Jeff Casello, Trevor Charles, Neil Craik, Charmaine Dean (Chair protem), Catherine Dong, Joel Dubin, Paul Fieguth (acting for Mary Wells), Mark Giesbrecht, Vivek Goel, Dennis Huber, Narveen Jandu, Jennifer Kieffer, Christiane Lemieux (acting for Kevin Hare), Robert Lemieux, Lili Liu, Ceileigh McAllister, Daniel O'Connor, Douglas Peers, Chao Tan, Diana Vangelisti, Kathy Winter (secretary)

Guests: Jean Becker, David DeVidi

Guest Resources/Observers: Beth Gallagher, Andrea Kelman, Beth Namachchivaya, Fayaz Noormohamed, Daniela Seskar-Hencic, Allan Starr

Regrets: Neil Craik, Kevin Hare, Jim Rush, Naima Samuel, Mary Wells

Organization of Meeting: Charmaine Dean served as chair protem for James Rush, and Kathy Winter acted as secretary. The secretary advised that due notice of the meeting had been given, a quorum was present, and the meeting was properly constituted.

1. DECLARATIONS OF CONFLICT OF INTEREST

No conflicts of interest were declared.

2. MINUTES OF THE 18 MAY 2021 MEETING AND BUSINESS ARISING

By consensus, the minutes were approved as distributed.

3. FUTURE OF WATERLOO DISCUSSION AND VISIONING: WATERLOO AT 100

The committee participated in the first of several long-term visioning exercises for the university—receiving from the President and Vice-Chancellor, Dr. Vivek Goel, the invitation to examine and discuss what the institution aspires to become by its 100th anniversary in 2057. Goel provided an overview of the [Waterloo at 100 webpage](#), including a futures framework (societal, technological, sustainable, health, economic) to apply to education, research, and innovation; and posed 6 key discussion questions pertinent to the evolution and future shaping of the University, as distributed.

Through considered reflection, the Senate Long Range Planning Committee identified elements fundamental to the question “*How Waterloo will evolve as an institution?*” These include:

- Addressing and prioritizing the impacts of many years of injustices through realizing a fully indigenized and decolonized institution (bringing reform to policy, scholarship, research, teaching, physical space, hiring practices).
- Increasing the value of the in-person experience; community building, emphasizing the grad/undergrad student experience, student-centred activities, work-integrated learning with external partnerships.
- Building agile/nimble infrastructure, including governance, that aligns with external branding and messaging.
- Envisioning future needs of individuals and society and pioneering responses thereon (flexible and individualized pathways, missions or disciplines vs majors, shorter-term credentials, lifelong learning, Alumni as expert resource pool).
- Increasing internal visibility to more comprehensively leverage interdisciplinarity (e.g., A.I., quantum, nano, and intersection with Health).
- Communicating core strengths more adeptly and impactfully.

The Senate Long Range Planning Committee committed to ongoing involvement in shaping and visioning Waterloo at 100.

4. OTHER BUSINESS

As part of the Senate Governance Review (January 2022-present), the Senate Long Range Planning Committee will allocate time during its next meeting to reflect on its meeting frequency, as well as structure and functioning per [Senate Bylaw 2 \(section 3\)](#) where the membership and powers and duties are described.

5. NEXT MEETING: Thursday, 29 September 2022, 10:30 a.m. -12:00 p.m., NH 3318.

25 May 2022

Kathy Winter, PhD, CPsych,
Assistant University Secretary



UNIVERSITY OF
WATERLOO

To: Senate Long Range Planning Committee (SLRP)
From: Vivek Goel, President & Vice-Chancellor
Date: September 23, 2022
Subject: Waterloo at 100

I look forward to discussing the [Waterloo at 100 discussion](#) paper with you next week, available at the hyperlink and as enclosed. As many will know, Waterloo at 100 is a long-term visioning exercise for the institution, concerned with addressing the question: what do we as an institution aspire to become by our 100th anniversary in 2057?

Earlier this year, I found our preliminary conversation on Waterloo at 100 very helpful. The questions and comments provided have been combined with those from many teams and individuals in our community over the Winter and Spring terms. At our meeting next week, I am excited to further this process of gathering inputs and ideas to support the development of the Waterloo at 100 vision paper to be released early next year.

I wanted to point out that members of SLRP who are also members of the Board and/or Senate will be engaging with the Waterloo at 100 discussion paper at the University's Board Retreat, which takes place a day prior to our meeting and includes a joint morning session with Senate.

At our meeting, to optimize time for engagement, I will not make a presentation on the discussion paper but would rather encourage all members to read the discussion paper and note its several questions. Please bring to our meeting your responses, comments, and insights, particularly those relating to the big ideas for Waterloo at 100. Of course, your own questions are highly encouraged to further our discussion.

Please note, the discussion paper is also available through the [Waterloo at 100 webpage](#). Following our discussion, you can use the feedback form there to enter any points you may not have had the chance to provide at our meeting or please share directly with Fayaz Noormohamed. Please also share this webpage with your networks and the wider Waterloo community, as we are seeking contributions from a full range of individuals and groups connected to the University.

Once again, I look forward to our conversation and to discussing your questions and suggestions for Waterloo at 100.

WATERLOO AT 100 DISCUSSION PAPER

Fall 2022 Consultations

1. Why Waterloo at 100?

The University of Waterloo defied tradition by integrating academic and research excellence with work-integrated learning when it was founded by local community leaders in 1957. In our rapidly changing world, we can honour this legacy by being unconventional again as we imagine a bold future that addresses humanity's most pressing challenges. Waterloo at 100 is an exercise to develop a longer-term vision that will address: *What do we as an institution aspire to become by our 100th anniversary in 2057?*

During the first part of 2022, more than 1,000 people participated in preliminary consultations to develop initial ideas for Waterloo at 100. Students, faculty, staff, alumni, community and external partners shared their ideas about the future of Waterloo. These conversations have helped shape the direction the vision paper will take, which will be released early next year. These engagements form the basis of this discussion paper, which aims to stimulate more contributions to Waterloo at 100 through further consultations this fall.

2. An Evolving Institution in an Evolving World

The University of Waterloo has built a strong reputation for innovation and excellence in a relatively short period. Our founding years were marked by bold approaches to education that were well ahead of their time. Our founders, local community, and industry leaders saw the need to train engineers in a transformative manner to power the local and broader economy. We innovated the nature of learning through cooperative education and stand today as a global leader in work-integrated learning. In the sixties, a faculty uniquely dedicated to mathematics was established with the foresight to house computer science, which today is internationally renowned for its research and specializations spanning mathematics and beyond. Our Faculty of

Environment – the largest in Canada – founded more than fifty years ago adopted from its inception a truly interdisciplinary approach to teaching and research to foster sustainable solutions to the most complex challenges facing our planet. Today, all six faculties lead globally in diverse disciplines such as computer science, electrical and electronic engineering, optometry, psychology, philosophy, accounting and finance, environmental sciences, and recreation and leisure studies.

Over the decades, Waterloo’s entrepreneurial spirit continues to grow and deepen, fueled by a distinctive innovation ecosystem that is itself constantly expanding. Students and faculty continue to be drawn to Waterloo because it is a research-intensive university motivated by and addressing challenges in the real world.

However, initial consultations have confirmed that the University must accelerate its evolution to become an institution fit for the future. The global pandemic we continue to weather has driven and exacerbated inequities and challenges in the constantly changing educational and global landscapes around us. Waterloo must work to both maintain excellence in its historic areas of strength while delivering on new directions and solutions desperately needed for our future.

3. A Framework for our Impacts, Strengths, and Differentiators

The Futures Framework is a key component of the Waterloo at 100 vision. It serves to organize and inspire our collaborations, activities, and outputs as we seek to address humanity’s greatest challenges. The Framework is based on Waterloo’s unique academic and research strengths working in tandem with our network of institutional differentiators: experiential education, entrepreneurship, and fundamental and applied research that’s connected.

We need to also remind ourselves of our founding differentiator: a deep connection with the local region and community. The University was founded by local leaders who sought to propel the region’s development. A commitment to the local community enriches each of our other differentiators. Local connections initially powered Waterloo’s cooperative education program and today continue to employ thousands of

students at any given time. Connections to our surroundings help shape and sustain our entrepreneurial drive. The region and its people provide our researchers with important issues and topics for investigating and solving real-world problems. This connectedness remains a constant work-in-progress, especially as the region continues to evolve with new institutions and networks in academia, research, policymaking, and technology innovation. Into our future, Waterloo can continue to strengthen its reputation and credibility globally with its relevance and leadership locally.

FIVE INTERCONNECTED FUTURES

At the framework's core is the question of how we envision the future of humanity. Five Futures aligned to our present and growing strength areas are outlined, through which our impacts can be made. In developing these futures, we imagine the future for humanity. What will it mean to be human in a world being so rapidly transformed by so many forces?

We begin with a focus on **Societal Futures**, given the intention of asking first about the future of humanity. This focus will be sharpened over time based on existing and new interests shared by a growing proportion of students and scholars concerned for a more human-focused and progressive society for all. Waterloo will learn from and contribute to human and social development in our region where community, family, and personal relations are transforming rapidly.

Waterloo's deepening experiences in supporting **Sustainable Futures** follows, given our aspiration to be positioned as leaders in education, research and application as important to advancing society. Today, much of the teaching, inquiry, and outreach taking place through our faculties and research centres and institutes focus on understanding and contributing to sustainability and the connections to be strengthened between a more sustainable environment and resilient economy. Of note are catalytic projects like the Sustainable Futures Initiative launched this year. The Initiative is making possible discovery and application at the intersection of energy, climate, and water.

Health Futures represents another key application area for Waterloo. As with Sustainable Futures, the University's educational, research, and innovation activities focused on health directly and indirectly will continue and grow significantly into the decades ahead. Today, we are leaders in areas such as population and public health and aging in the community. Through our Innovation Arena developed in partnership with the City of Kitchener, Waterloo is defining today how the decades ahead will unfold. The Arena will house and leverage collaborations that turn novel ideas into breakthroughs that improve individual and societal health. These impacts align with Waterloo's goal to lead nationally and globally at the interface of health, society, and technology, particularly through the development and dissemination of digital and virtual care tools.

Technological Futures at Waterloo is a key thrust and a necessary driver for other areas – such as sustainability and health – to flourish. The University already boasts an impressive command in developing and applying technologies. Our achievements into the future in areas such as artificial intelligence, robotics, and nano- and quantum technologies will continue to evolve with more deliberate focus on defining what socially responsible technology looks like. In always appreciating a long-term view, these advancements will be furthered through our relentless commitment to fundamental research. We know from our experience that a commitment to fundamental science and research leads to the advancement of understanding of our ourselves, our planet, and our cosmos, and to enable the ongoing development of technologies we cannot imagine today.

Finally, we can commit the years and decades ahead to building **Economic Futures** – a fundamental driver to resource and sustain the desired outcomes across all Futures. Our future requires us to ensure our society generates greater resources and wealth in an equitable manner if we are to address the interrelated challenges before us. Put simply, we must help our nation address its productivity gap. At Waterloo, our strengths in technology complement a pervasive model of business and entrepreneurial education and supports for learners and faculty alike. We observe how this dynamic model is responsible for Waterloo's ability to spur innovation in all spheres of human endeavor. Co-op at Waterloo and other modalities in experiential education endow us with

insights and partnerships in industry, government, and civil society, enriching our innovation capability. Through scholarship and thought leadership on innovation and entrepreneurship we can significantly enhance our role in shaping a stronger, more productive, resilient, and inclusive economy in Canada and the world.

These five futures are all interconnected – it is at the intersections amongst the futures and building on our differentiators that we truly have opportunities to lead globally.

4. Our Journey to 2057

In our consultations, many expressed their appreciation for the capacity of the Futures Framework to be an organizing device that brings greater coordination to the outstanding efforts and activities of various groups within and connected to the University. At the same time, we heard from many who commented on the need for the institution to continue to evolve through innovation and improvements if it expects to make the impacts we desire.

What follows are the suggestions and ideas that came forward to help shape our evolving institution. These are organized into three ‘forecasts’ for our journey to 2057. Many of the ideas reinforce recommendations from reports and studies commissioned in the recent past to guide student success, campus wellness, strategic planning, and institutional performance.

The concept of three forecasts – Graduates, Knowledge, and Campus – aligns well to our current strategic plan, *Connecting Imagination with Impact*. These forecasts can serve as longer-term horizons for present and future strategic initiatives under the plan with its three themes of Developing Talent, Advancing Research, and Strengthening Community. The ideas presented combine those that help broaden and extend the work of our strategic initiatives today as well as signal new opportunities and intersections through which activities might be developed to address existing and emerging needs. Indeed, there is great potential for a well-developed vision to confidently steer a broad range of initiatives that collectively help define the University’s future.

Graduates 2057	Knowledge 2057	Campus 2057
<ol style="list-style-type: none"> 1. with distinctive attributes 2. thinking and acting at intersections 3. develop and work with transformational tech 4. learning about oneself 5. who never stop learning 	<ol style="list-style-type: none"> 1. grows with collaborations 2. trusted publicly 3. mobilized through commercialization and policy 4. interdisciplinary 5. ...that counts 	<ol style="list-style-type: none"> 1. leading in Indigeneity and inclusivity 2. accessible 3. sustainable 4. transformational for its engagement 5. ...where change starts

GRADUATES 2057

Our students from 35 years ago are today's leaders and changemakers. The same will be said of today's students in 2057. What will be the characteristics of Waterloo's alumni in 2057? How will their leadership drive positive change?

- 1. Graduates with distinctive attributes reflecting a Waterloo education** including, to name a few: (1) placing humanity and equity at the centre of inquiry, design, and action; (2) globally minded citizens; those who can act locally and who seek to adapt and refine their actions based on implications felt at home and abroad; and (3) leaders with an entrepreneurial spirit to drive change, communicate, take risks, and make positive impacts across all sectors in society.
- 2. Graduates who discover, think, and act at intersections.** Our challenges now and in the future demand improvements and solutions by those who can produce new knowledge, integrate knowledge, and devise applications across and between traditionally defined fields and disciplines.
- 3. Graduates who can develop or work with new and emerging transformational technologies** to investigate and solve problems spanning all areas of human endeavor, from social governance to digital cities.
- 4. Graduates who have learned deeply and holistically about themselves,** the diversity of others around them, and the pluralist world they will impact. Learning and student engagement are to be transformative activities that integrate academic learning and student development. The former is not restricted to academic programming nor is the latter separate from classroom learning. In this regard, health and wellness are priorities to bettering oneself and society.

- 5. Graduates who never stop learning**, because fueling an inquiring mind and professional and personal development are already pursuits deemed necessary over the duration of one's life. Waterloo can become a place for open and flexible learning for our alumni and others around the world who seek to refresh and gain new knowledge and skills to navigate a dynamic future of work, technology, and transformations across society. As our alumni advance a better world through their conviction for continuous learning, they will constantly re-shape and improve their alma mater through myriad contributions and engagements over their lifetime.

KNOWLEDGE 2057

Knowledge production, dissemination, application, and mobilization exist in an interdependent system befitting the trusted leadership role universities must play in upholding the knowledge society of the 21st century. By our 100th anniversary, how will knowledge we generate, preserve, collate, and diffuse advance humanity?

- 1. Knowledge that grows with collaborative relationships**, including: (1) co-op students looping back to the Academy insights from external partners and the community to shape education, research, and service; (2) with the region's businesses, government, and civil society organizations who go further and faster with Waterloo to test and apply solutions leading to greater prosperity for all; (3) our local stakeholders in health service delivery and sustainability, co-producing with them new business models for equitable health outcomes and a net-zero future; (4) research partnerships between and beyond universities; and (5) widely known processes and incentives for cross-departmental, cross-faculty, and cross-institutional proposals and activities.
- 2. Knowledge that is trusted in physical and digital public spheres.** Scholars and students alike who proactively combat disinformation and polarization, capable of translating evidence and perspectives to inform and shape public opinion and policy making. This knowledge is also an outcome of fundamental inquiry and innovation with its capacity to open and broaden new perspectives and opportunities for the public good.
- 3. Knowledge that is mobilized responsibly through commercialization and policy innovation.** Because entrepreneurship is in Waterloo's DNA, the future of our knowledge will necessarily be scaled to benefit society. This knowledge can be mobilized with an expanded spirit of entrepreneurship that drives a mindset to innovate change and challenge the status quo where it is failing to make possible progress for all. In this respect, both commercialization and policy and program impact become effective avenues.

- 4. Knowledge that is increasingly interdisciplinary and modular.** Waterloo will advance open and modular learning for our graduates and the world because learning never stops. Where appropriate within traditional undergraduate education, Waterloo can explore the development of a core curriculum that encourages foundational skills, networking, and interdisciplinarity across the humanities, arts, and social and natural sciences. This would be followed by flexibly arranged immersion in disciplines for mastery, critical thinking, and intellectual independence.
- 5. Knowledge that counts rather than being counted.** Traditional metrics leaning on the volume of scholarship should evolve to give way to research that matters by making positive changes in society. Knowledge at Waterloo will continue to count by being outward facing, while continuing our commitments to fundamental science and scholarship. In addition to knowledge that knows no boundaries, Waterloo can be known globally for capacity to act locally in addressing our biggest challenges.

CAMPUS 2057

We must aim to improve quality of life for those in our community on our campus and beyond. The campus of 2057 should reflect what we envision for society both through in-person and remote interactions. What is our vision today for our campus of the future?

- 1. A campus that leads on Indigeneity and inclusivity** modelling for the sector and society the policies, procedures, programs, and infrastructure that define a decolonized institution, one that assertively removes barriers for groups traditionally facing discrimination and injustice. An innovation mentality should be applied to resolve equity concerns. Waterloo's community of students, faculty, staff, and governance will mirror Canada's diversity doing so always based on merit. Inclusivity will give way to pluralist exchange and belonging whilst celebrating difference.
- 2. An accessible campus – economically, physically, and digitally.** To attract the most meritorious and well-rounded in society and enhance diversity on campus, Waterloo will facilitate supports for students in need both here and abroad to access an excellent education. New and existing buildings and infrastructure will be fully accessible to our community and visitors of all abilities,

backgrounds, and orientations. Waterloo's future will be one that thrives in the appropriate design, curation, sharing of and access to online and digital modes and resources for working, teaching, learning, and research. To constantly improve accessibility and institutional performance, our data should be leveraged as a strategic resource for informed decision making.

- 3. A sustainable campus – environmentally and financially.** We will: (1) fulfil our obligations for carbon neutrality as per *Shift:Neutral* targets; (2) become an exemplar for others in sustainability through community and industry engagement and empowerment, research, and innovation; (3) establish diverse funding and support including from philanthropy aligned with our vision to realize a future for all of humanity; and (4) incentivize collective and interdisciplinary approaches to teaching and learning across faculties, research, innovation, and service.
- 4. A campus that transforms how we engage.** Universities develop the whole person and create meaningful belonging that endures beyond graduation. Waterloo will match rigor of academics with a deep sense of care for its people, delivering on the value of engaged interaction to deepen learning, inquiry, and work while leveraging digital technologies, pedagogies, and services to complement an excellent experience. We will extend our care, engaged interaction, and services to substantiate the alumni experience.
- 5. A campus where change starts here.** Where we embrace our own knowledge resources to constantly make better design decisions and improvements to infrastructure and the campus experience. Tapping the outstanding knowledge produced at Waterloo so it seeds ideas, practices, and facilities that help future-proof our campus and where everyone thrives.

5. Discussion

Since our unconventional founding 65 years ago, the University of Waterloo has developed into a remarkable institution. And the impacts from being unconventional have followed in all aspects of our mission. Waterloo at 100 is ultimately about setting a vision for the next 35 years and beyond that will help guide our highest aspirations and priorities to ensure the University continues to evolve, innovate, and make significant impacts to humanity's greatest challenges.

The questions below are provided to support discussion, input, and feedback on the Waterloo at 100 visioning work underway. Of course, your own questions and comments are welcome and encouraged to enrich our engagements and consultations over the fall term.

1. Waterloo innovated how learning is defined through co-op education. What could be Waterloo's next institutional innovations that enable the kind of future desired in Waterloo at 100?
2. How can Waterloo refine and reshape the way we approach and make education, learning, and research meaningful? Which technologies might serve our goals for relevance, access, and impact?
3. With respects to the five interconnected Futures for impacts in society, sustainability, health, technology, and the economy, what strategies and initiatives can we implement to help address the most pressing challenges today and into the future?
4. How and where can our values be refined and made more reflective of the emergent Waterloo at 100 vision?
5. What should we prioritize from among the aspirations in Waterloo at 100? What can be done in the short term to achieve early gains?
6. For many of the impacts we desire, our institution will need to evolve its management and operational culture. Where can changes be made to ensure success?
7. How will the institution measure progress and describe and recognize impact? Doing so should address the full range of activities at Waterloo, from institutional activities to contributions by our faculty, staff, students, and alumni.
