

UNIVERSITY OF WATERLOO  
STRATEGIC PLAN / 2020-2025

# CONNECTING IMAGINATION WITH IMPACT

UNIVERSITY OF  
WATERLOO



# **WATERLOO IS BUILT FOR CHANGE**

A new Waterloo plan for an era of rapid change.

It's tempting to call on the courage of our founders to introduce Waterloo's new strategic plan but my mind keeps turning to our first-year students.

They come here on the promise of a bright future. They live and learn with strangers for a time. Very quickly, they move beyond lecture halls into workplaces, relationships, laboratories, incubators and the field.

They choose to study at an institution that is fundamentally different from many universities in the world. They embrace a learning community deeply connected to the dynamism and disruptions of the real world.

We are launching this strategic plan at a time of rapid societal, technological and environmental change. Universities are being called to improve society and drive prosperity in a responsible way by challenging traditional models of education.

## **BUILT FOR CHANGE**

The good news is Waterloo was built for change. Our willingness to take risks and embrace new approaches distinguished us from the beginning when we established our renowned co-operative education program and allowed entrepreneurial researchers to own their intellectual property.

Waterloo's co-operative education program has also created a vast network of employers that inspires learning and research while connecting Waterloo people to the immediate and long-term needs of industry and communities around the world. We believe Waterloo's unique approach to solving important problems – one that combines boundary-pushing research, experiential education and entrepreneurship – is how we contribute to society.

As much as our foundation is rock solid, we are not standing still.

## THEMES FOR IMPACT

This strategic plan builds on our foundation in three intersecting themes for impact, all with local and global impact:

- **Developing talent for a complex future**
- **Advancing research for global impact**
- **Strengthening sustainable and diverse communities**

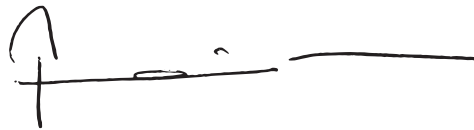
We are committed to transforming how we teach and learn. We are committed to supporting fundamental research as well as collaboration across research disciplines. We will empower future-ready talent who will realize their fullest potential through richer student experiences that only Waterloo can provide. It is at the intersections of these three theme areas that Waterloo is uniquely positioned to produce talent and knowledge to drive societal, environmental and economic well-being.

We will leverage our global employer network to power international and interdisciplinary innovations as our brightest minds build relationships with policy-makers, community members and business people from around the world. We know the most urgent issues of our time, from climate change to automation and an aging population, call us to work across disciplines.

## CONNECTING TALENT AND KNOWLEDGE TO THE REAL WORLD

Consider again the courage of our first-year students. Early on in their studies we call on them to adapt to the uncertainties of the real world.

It's time for all of us to embrace their courage and leverage the advantages of our Waterloo culture to build the 21st-century model of a university: a place where talent and knowledge impact the complex, changing realities of our society, climate and the economy.



FERIDUN HAMDULLAHPUR

PRESIDENT AND VICE-CHANCELLOR

# SIGNATURE COMMITMENTS

BY 2025, THE UNIVERSITY OF WATERLOO WILL:

- Build on our global leadership in co-operative education to provide every undergraduate and graduate student with expanded options in experiential learning.
- Empower students to leverage diverse learning experiences by creating more flexible learning pathways.
- Be a global powerhouse for commercializing research, developing new enterprises and supporting business growth.
- Leverage Waterloo's vast employer network and academic strengths to deliver a dynamic framework of learning-integrated work for professionals seeking to thrive and lead.
- Align our research strengths deliberately with important global challenges.
- Lead globally and nationally at the interface of society, health and technology.
- Create a sustainable, supportive environment for living, learning, working and discovery that is worthy of our students and University community.

# OUR VISION

## Waterloo: Connecting imagination with impact for a better world.

In this strategic plan, we are building on our unconventional foundation by reimagining three broad themes for impact that will position Waterloo to develop talent for a complex future, advance research for global impact and strengthen Waterloo's sustainable and diverse communities.

These three themes share a vision for a better world that includes the broadest spectrum of innovation – from imagination to impact.

Scholars and students who want to solve the world's deepest mysteries will find a home here. Researchers and entrepreneurs seeking solutions to climate change and other complex health, social or environmental problems will pursue their passions here.

Some will thrive by following their dreams and building partnerships with industry, government or the community. While disciplinary strengths are essential, we believe many new discoveries, innovations and solutions will follow a path that cuts across traditional disciplines. All of our endeavours will grow in an inclusive community for students, faculty, staff and alumni within and beyond the borders of our campuses.

We embrace the reality of students who are both poet and marketer, engineer and activist, scientist and entrepreneur, mathematician and artist. Some in our diverse community may pursue passions in philosophy and computer science, while others blend history and health.

Waterloo will innovate for a better world by inspiring imagination and enabling our people to realize their boldest dreams.

# OUR MISSION

The University of Waterloo's mission is to advance learning and knowledge through teaching, research, and scholarship, nationally and internationally, in an environment of free expression and inquiry.

*(The University of Waterloo Act)*

The University of Waterloo is a signatory to the Magna Charta Universitatum which upholds four fundamental principles: moral and intellectual independence of teaching and research; the inseparable nature of teaching and research; freedom in research and teaching; and the affirmation of the vital need for different cultures to know and influence each other in the constant pursuit of universal knowledge.

# OUR VALUES

At Waterloo, we will navigate this age of complexity guided by our nimble culture and our shared connection to the human values of curiosity, courage, engagement and belonging.

## WE ARE CURIOUS.

Curiosity drives the important work of fundamental research. It transforms teaching and learning and creates new connections on our campus and around the world. The same spirit of inquiry that inspires researchers to investigate the wonder of our world motivates professors to take risks in their teaching and learning practice. Curiosity drives students to build their own ventures or pursue new disciplines, while faculty and staff seek new challenges to support the University's mission and propel it forward.

## WE ARE COURAGEOUS.

Waterloo's founders made the courageous decision to step outside centuries of university tradition by integrating co-operative education with academic excellence. Our innovative culture is also rooted in the unorthodox decision to grant researchers ownership of intellectual property. A culture of tenacity and risk-taking, which has transformed this region into a technology hub for innovation, will drive Waterloo forward with integrity and purpose as we seek solutions to important problems on our campus and in the world.

## WE ARE ENGAGED.

In the 1950s, the University of Waterloo's founders took note of the global space race. They examined Canada's growing postwar economy. They listened to the needs of leaders in Waterloo region and created a unique university. Connecting with our community and being engaged nationally and globally is part of Waterloo's foundation. As we grapple with complex sustainability issues and environmental, geopolitical and technological changes in our society, we will continue Waterloo's tradition of looking outward for the betterment of humanity, with our willingness to engage in the most pressing challenges in our own community.

**WE ALL BELONG.**

We value each other as individuals. In our pursuit of excellence, we create conditions for everyone to flourish. We know that academic rigour and genuine care and concern can co-exist. The University of Waterloo celebrates campus members and our alumni while striving to proactively find, prevent and remove barriers so everyone can achieve their full potential. Diverse voices and perspectives enrich our teaching and research. Waterloo honours the complexity that distinct cultures and multiple identities and views bring to the vital work of teaching and research in our society. Achieving a positive learning experience requires a proactive community that demonstrates genuine care, concern and respect for all members and the world in which we live.



# IMPACT THEMES

At Waterloo, we believe that society advances when universities are connected to the community, industry and policy-makers who shape our country and the world.

Learners want relevant, authentic experiences that will prepare them for a complex future. Employers want talent that can adapt to and lead change. Rapid technological, environmental and societal changes call us to work in new ways – across disciplines, borders and sectors – to find solutions to complex challenges of the future. All of this must happen within a diverse environment so everyone can participate to their full potential for optimal solutions.

When we reflect on Waterloo's past we can be confident that we have understood risk, embraced change and delivered results. But now is the time for renewal. New forces of change – economic restructuring, an aging society, political instability and rapid advances in technology – call us to reimagine our role as an architect of Canada's future.

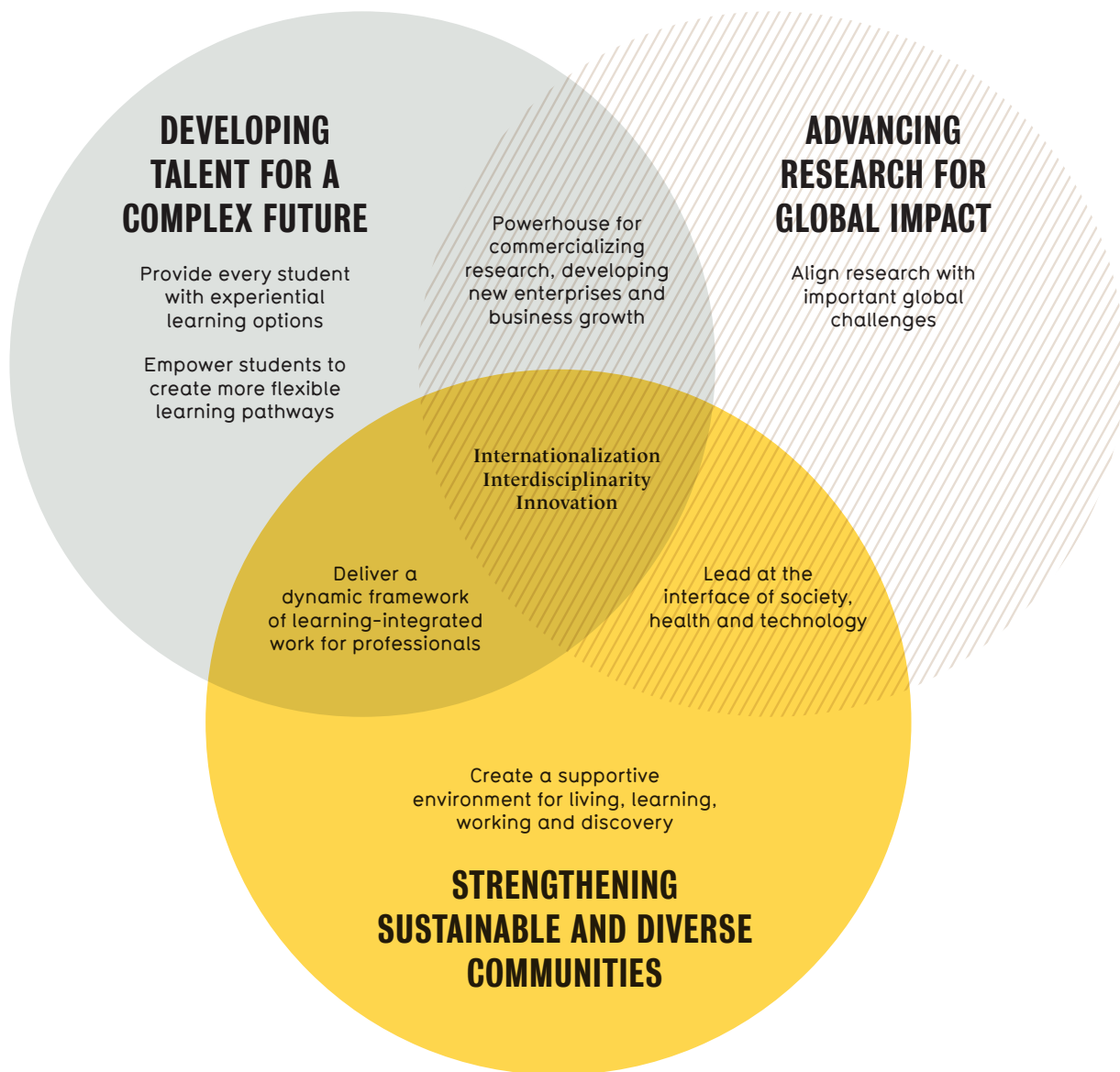
Our vast employer network, grown through our co-operative education program, will continue to give our students an advantage as they push their talent beyond conventional boundaries. Waterloo's tradition of experiential learning challenges our diverse professors to think beyond the classroom. It inspires our researchers and enriches our globally renowned entrepreneurial ecosystem.

Waterloo will build on our foundation to mobilize change at the intersection of three theme areas, all with local and global impact:

- **Developing talent for a complex future**
- **Advancing research for global impact**
- **Strengthening sustainable and diverse communities**

Our focus on internationalization and interdisciplinarity will enrich new thinking in these three theme areas. Attracting talent from around the world creates a dynamic teaching environment that catalyzes learning with cultural awareness. Students will learn in a variety of disciplines and become more attuned to our complex world, while researchers will break down barriers between disciplines to identify and solve complex problems. Diversity will support transformation as we meet the challenges of our future.

Internationalization will bring diverse talent from around the world to our campus while giving students and researchers more opportunities to build relationships globally. Innovation underpinned by internationalization and interdisciplinarity will help Waterloo take an even more prominent role on the world stage.



# DEVELOPING TALENT FOR A COMPLEX FUTURE

Learners will have to apply knowledge in contexts we cannot even imagine today.

Waterloo is preparing people to lead in a future that promises great opportunity and waves of disruption. The talent we develop at Waterloo will continue to have an impact in our region and around the world.

Our vision for the future places learners at the centre of everything we do. Waterloo will foster an integrated learning environment that is powered by curiosity, informed by research and transformative in practice.

Students must be prepared for an age of rapid technological, environmental and economic shifts. Our graduates will have to apply knowledge in contexts that we cannot even imagine today. No industry or career pathway will be immune to the changes. Canada and the world will need creative minds who can navigate diverse identities and leverage new knowledge to create sustainable, prosperous communities.

Teaching and learning at Waterloo will be interdisciplinary and international. Students will be empowered by supportive connections within and outside our University community. Today, Waterloo is a global leader in work-integrated learning. By 2025, Waterloo will also be a premier provider of learning-integrated work to support professionals and others who need to reskill and reimagine their careers.

We will build on our global leadership in co-operative education with a commitment to provide every undergraduate and graduate student with expanded options in experiential learning by 2025. We are also committed to empowering students to create more flexible learning pathways aligned with the future of work and learning.

We know first-hand how extra-curricular experiences such as community engagement, student leadership, athletics and the arts enrich learning. Waterloo will embrace bold new approaches in and out of the classroom in a caring environment that empowers future leaders with durable skills that include critical thinking, cultural competence and resilience.

Developing talent for a complex future:

# GOALS AND OBJECTIVES

## GOAL

Educate global citizens for the future of work and learning to thrive in an age of rapid change by putting learners at the centre of everything we do.

## OBJECTIVES

- › Increase flexible curricula that stimulate reflective, deep learning and develop competencies to address global challenges and opportunities.
- › Promote quality and innovation in teaching and learning and support infrastructure, policy and practice that remove systemic barriers.
- › Find new ways to work together and remove barriers to collaboration, interdisciplinarity and the integration of knowledge.
- › Continue to advance an agile, technology-enabled learning ecosystem that supports high-quality, open content and digital learning options.
- › Further enhance the “Business at Waterloo” programming model to inspire people to lead in a rapidly changing economy.

## GOAL

Continue to lead the world in co-operative education and support the workforce of the future through fully integrated academic and experiential learning opportunities.

## OBJECTIVES

- › Leverage Waterloo’s employer, industry, government and alumni networks to enhance our connection to the community, Canada and the world.
- › Continue to demonstrate global prominence in the development, recruitment and retention of future-ready talent, with a focus on building a diverse workforce.
- › Increase interdisciplinary opportunities for co-op students to gain locally and globally relevant research experience.

#### GOAL

Establish a unique Waterloo approach to support learning at various stages of individuals' professional lives.

#### OBJECTIVES

- › Establish a lifelong learning centre that will enable and encourage our alumni and other professionals to reskill in a society that increasingly requires continuous learning.
- › Leverage and optimize government, industry and community partnerships and engage alumni in lifelong learning relationships.

#### GOAL

Enhance graduate and post-doctoral studies by emphasizing the unique attributes of the University of Waterloo and our talented and diverse graduate student community.

#### OBJECTIVES

- › Grow work-integrated learning opportunities in graduate studies.
- › Increase the availability and depth of partnerships with external agencies to advance applied research and learning opportunities for graduate students, post-doctoral scholars and faculty.
- › Foster an interdisciplinary environment for graduate students and post-doctoral scholars to increase the impact of their work.
- › Strengthen academic, personal and professional supports for our graduate student community.
- › Stimulate opportunities for interdisciplinary research by developing more flexible graduate programs.

# ADVANCING RESEARCH FOR GLOBAL IMPACT

Waterloo's research environment is uniquely energized by co-operative education and entrepreneurship.

As a comprehensive, research-intensive university, Waterloo researchers embrace all forms of scholarship from curiosity-based inquiry to reflective scholarship and applied research. Waterloo's strong research culture is accelerated by our vibrant and dynamic fundamental research foundation.

## WATERLOO WILL:

- **accelerate opportunities to lead in new and emerging research areas while building on our curiosity-based and fundamental, discipline-specific strengths.**

Our commitment to solving important problems in an integrated way – one that encompasses disciplinary and interdisciplinary research, experiential learning and all forms of entrepreneurship – is our defining approach to improving society.

Our research community has a unique perspective on real-world problems that is shaped by fundamental research excellence and the deep industry and community partnerships of our renowned co-operative education program.

By 2025, we are committed to aligning our research strengths deliberately with important global challenges:

- **Quantum science, nanotechnology, connectivity and telecommunications**
- **Water, energy and climate: sustainability, security, infrastructure**
- **Information technology and its impact, including intelligent systems, human-machine interfaces, cybersecurity, privacy and data science**
- **Robotics and advanced manufacturing**
- **Health technologies**

Addressing global challenges requires us to consider the key pillars that support this plan and their context: interdisciplinarity, internationalization and innovation. Importantly, the plan recognizes that success requires us to:

- **understand and enhance human experiences and address the human dimensions of global challenges and examine ways to translate knowledge for governance and policy.**

This will require the talents of leading Waterloo researchers in disciplines ranging from the humanities, social sciences, environmental studies, applied health sciences, the arts, science, engineering and mathematics, from fundamental research to policy development.

By 2025, Waterloo is also committed to being a global powerhouse for commercializing research, developing new enterprises and supporting business growth.

Technology is a critical tool for solving some of the world's problems, but so too are the policy changes and critical interventions that come from reflective scholarship. By 2025, Waterloo will lead nationally and globally at the interface of society, health and technology. By leveraging its research strengths in technology and the social, economic, biological and environmental determinants of health, Waterloo will lead in securing healthy futures for local and global communities.

Advancing research for global impact:

## GOALS AND OBJECTIVES

### GOAL

Waterloo will use its disciplinary and interdisciplinary strengths to solve increasingly complex, real-world problems.

### OBJECTIVES

- › Lead nationally and globally at the interface of society, health and technology by establishing an interdisciplinary institute that builds on Waterloo's academic and research strengths in technology as well as the determinants of health.
- › Create tomorrow's research leaders by attracting and retaining outstanding, diverse research faculty, graduate students and post-doctoral scholars from around the world.
- › Explore opportunities to create cross-Faculty, interdisciplinary research teams that use disciplinary strengths to address problems of societal importance.
- › Prioritize Waterloo's international partnerships to maximize impact for the global good.

### GOAL

Achieve greater research impact by leveraging Waterloo's partnerships.

### OBJECTIVES

- › Strengthen and increase formal partnerships with strategic research partner institutions.
- › Increase private-sector partnerships to develop and deploy new technologies that enhance the competitiveness and innovation of Canadian business.
- › Increase partnerships with the public and not-for-profit sectors to catalyze important policy development.



## GOAL

Propel Waterloo's global leadership in innovation, entrepreneurship and social impact.

## OBJECTIVES

- › Create interdisciplinary teams to engage with important sectors of Canada's economy to solve problems of common interest to the sector.
- › Increase infrastructure that supports commercialization and policy application of transformational research.
- › Establish a fund to provide commercialization internships for students, protect intellectual property and launch startup ventures.
- › Leverage alumni, research and industry networks to expand entrepreneurial opportunities for members of the Waterloo community.
- › Foster an engaged, nimble and open environment that stimulates entrepreneurial pursuits.

# **STRENGTHENING SUSTAINABLE AND DIVERSE COMMUNITIES**

Waterloo will make an impact on its campuses and around the world by fostering inclusivity, a sense of belonging and a culture of involvement.

Our community is a beacon for some of the brightest minds in the world, but it is also more.

Our community has young people who are the first in their families to attend university. There are individuals from racialized groups whose voices have been marginalized. Indigenous people live and work here. There are diverse individuals of many genders and sexual identities. There are international scholars who have left family behind to pursue their passions. Our community includes people with various abilities and distinct mental health experiences that result in different experiences of our campuses.

We all belong here.

The University is committed to living our shared responsibilities by building communities that imbue every aspect of our institution's mission with genuine care and concern for our students, faculty, staff, alumni and the world in which we live. As a leading institution mobilizing knowledge and research related to the United Nations Sustainable Development Goals, Waterloo is committed to sustainability within and beyond our campus borders.

We include those who live and work on our campuses and in our alumni communities in Waterloo region and around the world. We particularly recognize Indigenous students, faculty, staff and alumni. We are committed to learning about the rich history and culture of Indigenous people of this land and an institutional response to the Truth and Reconciliation Commission's calls for action.

## OUR RESPONSIBILITY TO STUDENTS

We hold a particular responsibility to our students that is reflected in our teaching mission and commitment to build diverse communities. We know that opportunities for enrichment outside the classroom in extra-curricular activities such as athletics, the arts, student government and our community are vital to student growth. We are committed to a comprehensive approach to mental health and wellness. We strive to create a sustainable, supportive environment for living, learning, working and discovery that is worthy of our students and University community.

The innovative spirit that has distinguished Waterloo globally must now be used to advance communities that are equitable, accessible and sustainable. We recognize not everyone has had the same opportunities due to systemic, societal issues and we are committed to identifying and removing barriers so that everyone can flourish, regardless of background or identity.

We also recognize that accelerating climate change will magnify existing societal issues, with marginalized communities being among the most affected. Our students, employees, partners and stakeholders around the world will be looking to Waterloo for leadership as we model transformative changes for a sustainable future.

Strengthening sustainable and diverse communities:

## GOALS AND OBJECTIVES

### GOAL

Be a people-centered institution committed to genuine care, concern, respect, inclusivity and well-being for all.

### OBJECTIVES

- › Working in partnership with all stakeholders, mobilize the commitments from the Okanagan Charter and Healthy Workplace statement to embed and promote sustainability and foster personal development and supportive environments for mental health and resilience, physical health, social inclusion, belonging and spiritual well-being in campus culture.
- › Nurture relationships between faculty and students to promote academic curiosity and risk-taking in a safe and supportive community of learners.
- › Create a supportive environment for international students that also celebrates their contributions to our diverse community.

### GOAL

Foster a connected and supportive community that inspires students, faculty, staff and alumni to achieve their personal, academic and professional goals while feeling valued.

### OBJECTIVES

- › Intentionally develop programming to inspire collaboration for shared research, teaching, learning and community building opportunities among our students, faculty, staff and alumni.
- › Develop a culture of involvement that fosters inclusivity and a sense of belonging.
- › Sustain a meaningful relationship with alumni around the world that includes peer support, social connection and learning over their lifetime.
- › Ensure co-op students experience continued connection to the University during their work terms.
- › Broaden our understanding and engagement of communities on our campuses and with our alumni, external partners, regional, national and international communities.

#### GOAL

Promote and support Indigenous initiatives and a culture of equity, diversity and inclusivity for all.

#### OBJECTIVES

- › Embrace and act upon the Truth and Reconciliation Commission's recommendations and calls to action and build stronger relationships with our local Indigenous community.
- › Improve the representation, participation and engagement of equity-seeking groups within our community.
- › Advance programs, policies and processes that foster equity, diversity and inclusivity.

#### GOAL

Continue to leverage our resources to engage, develop and build our capacity and infrastructure to create a sustainable and effective institution.

#### OBJECTIVES

- › Become a societal role model of sustainability in policy, process and practice through full implementation of the University's Environmental Sustainability Strategy and meaningful action to address climate change in our operations.
- › Leverage our entrepreneurial spirit and model organizational efficiency and sustainability in all domains of our service.
- › Ensure all campus community members understand their role in and contribute to a positive student experience.

# CONCLUSION

This is our plan to embrace the forces of change in our world.

It is a plan that will enable our institution to continue to foster dynamic talent ready to flourish in new economies. It will allow us to challenge the status quo. It will enable us to support our community and students who are worthy of the absolute best experiences and outcomes.

We will embrace our heritage of bold ambition and risk-taking. We will continue to take action that crosses disciplines, sectors and national borders as we build a new model of a 21st-century university.

A strategic plan is a catalyst for change and renewal. Our community has come together to imagine a Waterloo for 2025 and beyond. Today, we will challenge ourselves to bring the ideas in this plan to life, monitor our progress and be accountable to one another.

Building on the dreams, scholarship, and diversity of people at Waterloo, we will unlock knowledge and innovation to shape the future of our nation and the world. This is our plan to connect imagination with impact for a better world.