

WATERLOO ECONOMIC GUIDE



WATERLOOEDC
inventing the future

Looking to locate, relocate or expand?

Welcome to Waterloo

Waterloo is one of the most exciting ecosystems in Canada. With billions of dollars in new residential and commercial development, significant new business investments from global giants like Google and Toyota, a dynamic tech community featuring Canada's three fastest-growing tech companies and convenient access to Toronto, the United States and the world, Waterloo is a great place to invest. Why Waterloo for your business? Read this Economic Guide to find out.

Waterloo by the Numbers

1ST

Most VC Investments per capita in Canada

Communitech, 2021

1ST

Highest concentration in the world of mathematical and computer science talent is found at the University of Waterloo)

2ND

Highest concentration of start-ups worldwide

The Canadian Business Journal

1ST

University of Waterloo ranked #1 for computer science, engineering and mathematics

Maclean's 2021

2ND

Fastest growing region in Canada

Statistics Canada

1ST

University of Waterloo ranked #1 Canadian comprehensive research university for the past 13 years

Research Infosource 2020

Contents

Market Access and Transportation	4
Demographics	6
Higher Education	7
Co-operative Education	10
Wages and Salary	11
Workforce	12
Business Community	13
Target Cluster – Artificial Intelligence	14
Target Cluster – Robotics and Automation	15
Target Cluster – Automotive Technology	16
Target Cluster – Financial and Business Technology	17
Target Cluster – Cybersecurity	18
Innovation and Startup Ecosystem	19
Quality of Life and Affordability	20
Everything You Want – Right Next Door	21
Waterloo EDC Services	22



Market Access and Transportation

Waterloo is located on the western edge of the Toronto-Waterloo Corridor, which is North America's second largest technology cluster and Canada's largest consumer market. We're also at the centre of Canada's largest manufacturing corridor and the Detroit-Toronto automotive corridor. As a result, within just a few hours drive you'll find Canada's largest collection of manufacturing, automotive and tech companies.

Our community is close to six Canada-US border crossings, providing equally convenient access to the American Midwest – Detroit and Chicago – and the American Eastern Seaboard – Boston and New York. In fact, we're within a one-day drive (1200km/745mi) of 187 million consumers.



Market Access and Transportation continued

CONVENIENT ACCESS TO GLOBAL MARKETS

A short drive to Canada's largest and busiest airport, and in close proximity to four additional international airports, means Waterloo is an excellent starting point for reaching any destination.



TRADE AGREEMENTS PROVIDE ACCESS TO 60% OF GLOBAL GDP

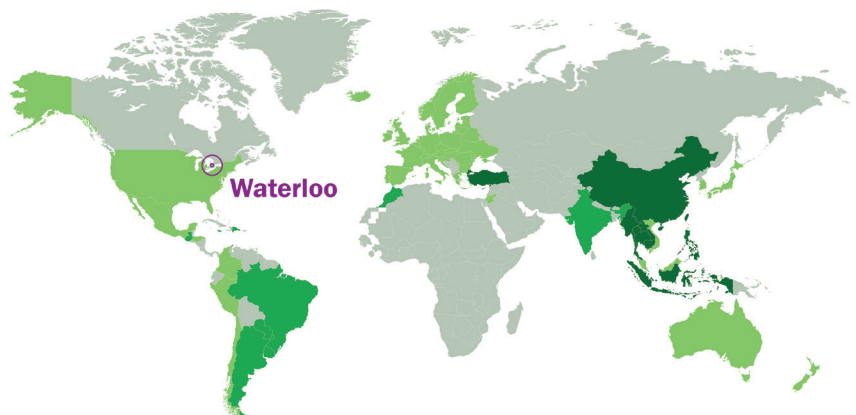
Companies in Canada can take advantage of the world's most comprehensive trade network. Thanks to trade agreements like the United States-Mexico-Canada Agreement (USMCA), the Comprehensive Economic Trade Agreement (CETA) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), Canada is #1 in the world

for trade connections to G7 countries. This means exceptional access to the Japan, United States and European Union markets.

In total, we have 14 free trade agreements with more than 51 countries representing 1.5 billion consumers and more than 60% of the global economy.

 FTA* Concluded or In Force	% of world GDP 62.5%
	Population(millions) 1,479
 Negotiations Commenced	% of world GDP 18.4%
	Population(millions) 1,969
 Exploratory Discussions	% of world GDP 6.7%
	Population(millions) 1,660

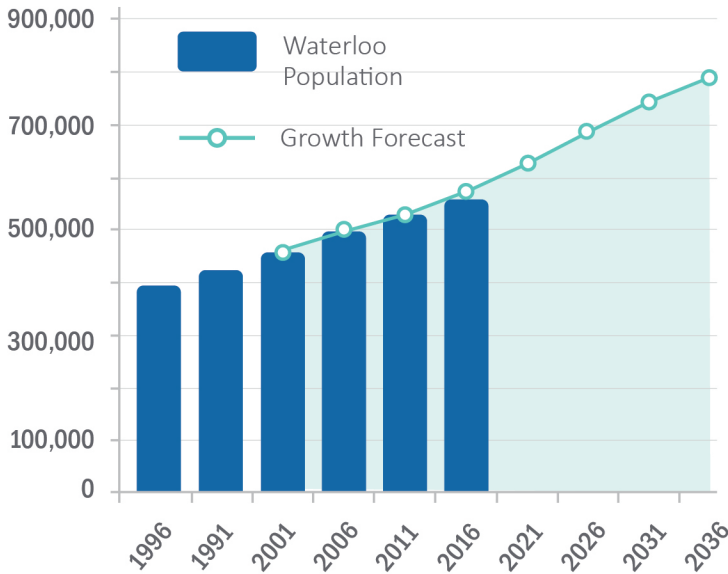
*FTA = Free Trade Agreement



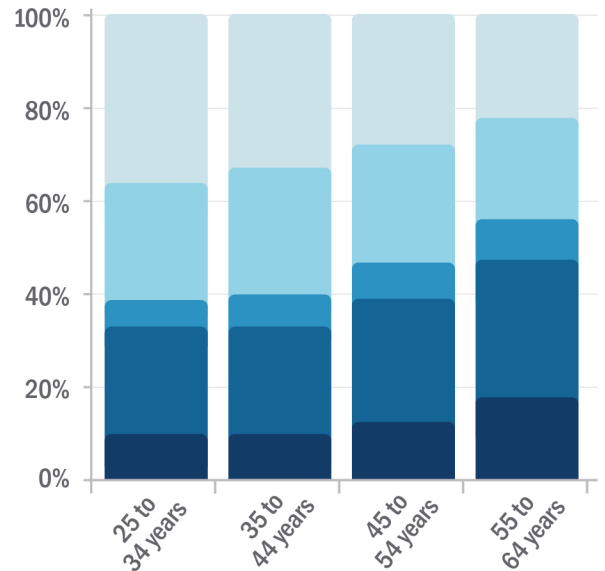
Demographics

In 2020, Waterloo had a population growth rate of 2%, making the city Canada's second-fastest growing community whose strength comes from its diverse and highly educated people.

Population Growth



Education Attainment by Age



23%
Residents Born Outside of Canada



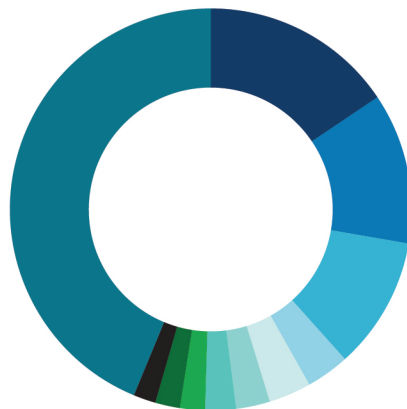
7th
Largest Proportion of Minorities in Ontario



120
Recorded Native Languages

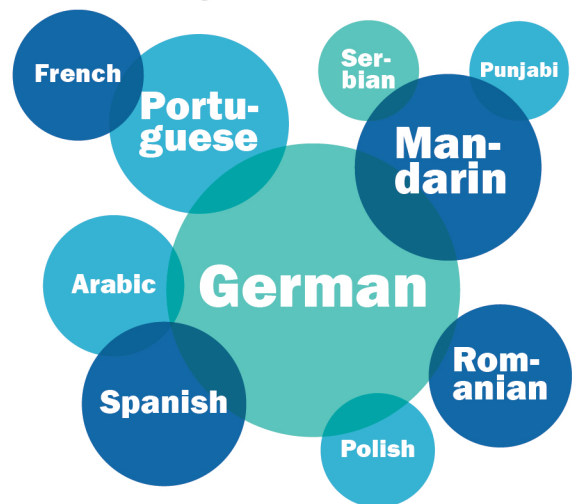
Country of Origin for Recent Immigrants

- Philippines
- India
- China
- Iran
- Pakistan
- United States
- Syria
- United Kingdom
- France
- South Korea
- Other countries



Recent immigrants are identified as landed immigrants in Canada in the last 5-10 years.

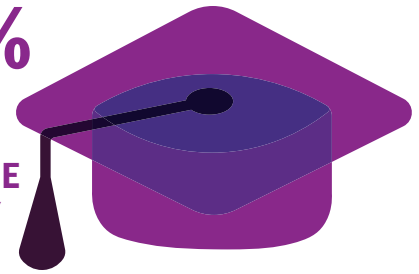
English is the most prevalent native language followed by German, Portuguese and Mandarin.



Higher Education

Waterloo is home to three post-secondary institutions, each with its own strengths. The University of Waterloo is Canada's top technology university. Wilfrid Laurier is home to one of Canada's best business schools and specializes in technology management. Conestoga College is one of Ontario's top polytechnic institutes, offering hands-on learning in manufacturing, information technology, trades and more.

55.8%
OF RESIDENTS
AGED 25-64
HAVE A COLLEGE
OR UNIVERSITY
QUALIFICATION



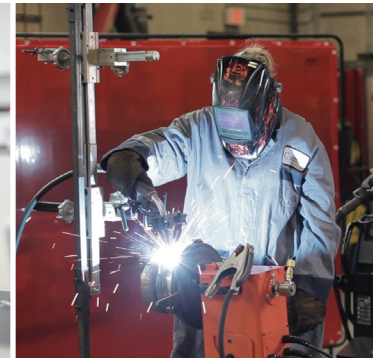
42,000+
STUDENTS



21,000+
STUDENTS



23,000+
STUDENTS



Higher Education continued



SPOTLIGHT: WILFRID LAURIER UNIVERSITY

An excellent all-around post-secondary institution, Wilfrid Laurier University (WLU) is particularly renowned for its business programs.

Home to the Lazaridis School of Business and Economics, the university produces top-flight graduates in Economics, Accounting and Entrepreneurship, as well as offering an MBA program. The unique Technology Management programs (undergraduate and graduate) provide work-ready talent for Waterloo's dynamic and fast-growing technology ecosystem.

Finally, the university's business co-operative education program is the largest business-specific work experience program in Canada.

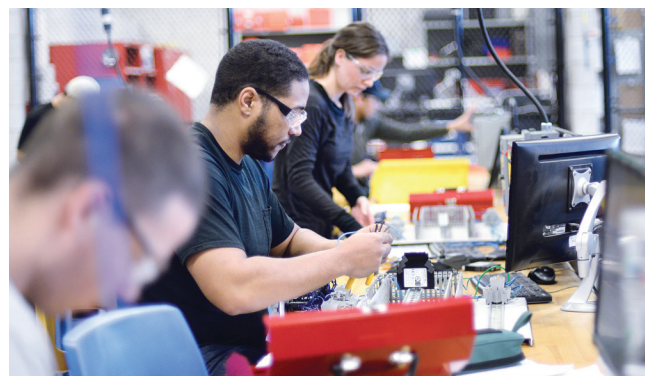


SPOTLIGHT: CONESTOGA COLLEGE

A top polytechnic institute, Conestoga College offers a wide array of programs that help build talent pipelines for multiple industries.

Home to 200 career-focused programs and Ontario's only college-based accreditation for engineering, Conestoga College is uniquely positioned to serve the talent needs of the manufacturing and information technology industries, to name a few. It is also growing, quickly. In the last two years, the College has completed an expansion of its technology campus and the creation of a new international business campus, as well as announcing plans for building Ontario's largest trades-focused campus.

With the largest polytechnic co-operative education program in Ontario, a collection of application-focused research centres and a reputation for industry partnership, Conestoga College can help companies grow and thrive in Waterloo.



Higher Education continued

SPOTLIGHT: UNIVERSITY OF WATERLOO

For more than a decade, the University of Waterloo has been one of Silicon Valley’s most productive recruiting grounds, for good reason. These students are of an exceptionally high quality, they are very entrepreneurial and those in co-operative education graduate with 2+ years of on-the-job experience.

Over 25% of all new students have a 95%+ entry average. This entry average sets UWaterloo apart from other Canadian universities. Even more impressive, as you drill down into UWaterloo’s core programs – computer science and engineering – the statistics become even more incredible.

FIVE FACTS ABOUT UWATERLOO:

- UWaterloo has held the title “Canada’s second most innovative university” for 28 consecutive years
- Home to the world’s largest concentration of math and computer science talent
- Over 18% of all Canadian tech founders are UWaterloo graduates
- Graduates of UWaterloo entrepreneurship programs are responsible for revenues exceeding \$2 billion over the last decade
- UWaterloo’s co-operative education program is the world’s largest and accounts for one-third of all university work terms in Canada

“Canada’s 2ND
Most Innovative
University”



PERCENT WITH ENTRY AVERAGE OVER 95% BY PROGRAM

Engineering	44.5%
Computer Science	49.8%
Software Engineering	86.3%



Co-operative Education

Co-operative education is post-secondary student work experience on steroids. The program differs at each institution, but the result is the same: students graduate with a ton of on-the-job experience and the ability to contribute from day one.

WHAT IS IT?

Co-operative Education (co-op) is a work experience program that gives post-secondary students an opportunity to apply their academic learning through hands-on experience.

PAID BY EMPLOYERS

Students are matched with employers and earn an average of \$12,000 per 4-month co-op term.

GLOBAL PROGRAM

Over 7,000 employers from 60+ countries leverage year-round co-op placements to fulfill their hiring needs.

Students receive
2+ YEARS
of hands-on work
experience collected in
4-8 month increments
over 5 years

The largest
co-op program in
the world with
31,000+
students per year

Companies can
receive up to
\$7000
in reimbursements

COMPANIES EMPLOYING OUR CO-OP TALENT



ORACLE + NETSUITE



Deloitte.



Morgan Stanley



FINANCIAL INCENTIVES



Through the Government of Canada's Student Work Placement Program (SWPP) organizations may receive \$5,000- \$7,000 per co-op student.



The Ontario government's Co-operative Education Tax Credit will reimburse a business for 25% to 30% of eligible costs, up to \$3,000 per co-op student.

BENEFITS TO EMPLOYERS

- 1 Meet short-term hiring needs cost-effectively.
- 2 Attract top talent by building your brand on campus.
- 3 Reduce time spent on orientation and training when hiring new graduates full-time by evaluating them as co-ops first
- 4 Effective long-term talent recruitment strategy.

Wages and Salary

TECHNOLOGY

Software Engineer	\$86,939
Product Manager (Technical)	\$104,292
Data Scientist	\$98,100
Application Developer	\$87,581
Applications Architect	\$106,008
Software Engineer	\$99,449
Software Developer	\$95,168

All figures are in CAD and represent the mean salary of individuals with five years of experience. The salaries do not include bonuses, incentives and other benefits.

Source: Economic Research Institute, 2021

MANUFACTURING

Production Labourer	\$40,307
Welder	\$53,776
Millwright	\$66,290
Logistics Manager	\$78,360
Quality Control Engineer	\$83,577
Manufacturing Engineer	\$84,040

All figures are in CAD and represent the mean salary of individuals with five years of experience. The salaries do not include bonuses, incentives and other benefits.

Source: Economic Research Institute, 2021

BUSINESS OPERATIONS AND SUPPORT

Business Intelligence Analyst	\$85,106
Accountant	\$75,954
Accounting Clerk	\$46,542
Chief Financial Officer	\$188,750
In-House Counsel	\$119,500
Chief Marketing Officer	\$169,500
Chief Technology Officer	\$174,750

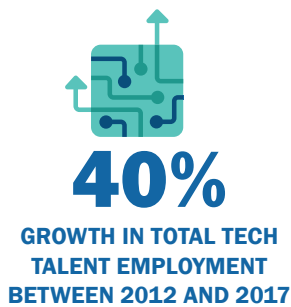
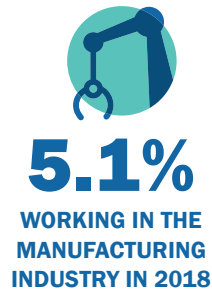
All figures are in CAD and represent the mean salary of individuals with five years of experience. The salaries do not include bonuses, incentives and other benefits.

Source: Economic Research Institute, 2021, Robert Half Salary Guide 2021

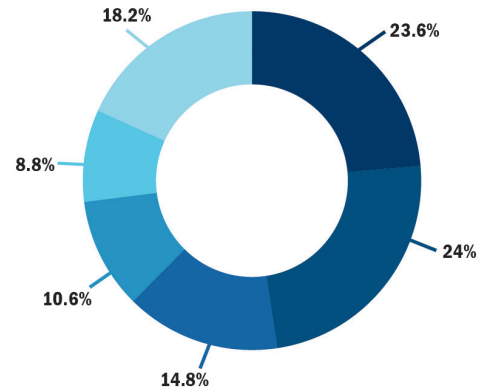


Workforce

Waterloo has a diverse and highly-educated workforce, with particular strengths in manufacturing and technology. According to CBRE, Waterloo has the value for high quality tech talent in Canada. Local talent in Waterloo is more likely to have studied a Science, Technology, Engineering and Mathematics subject than anywhere else in Canada.

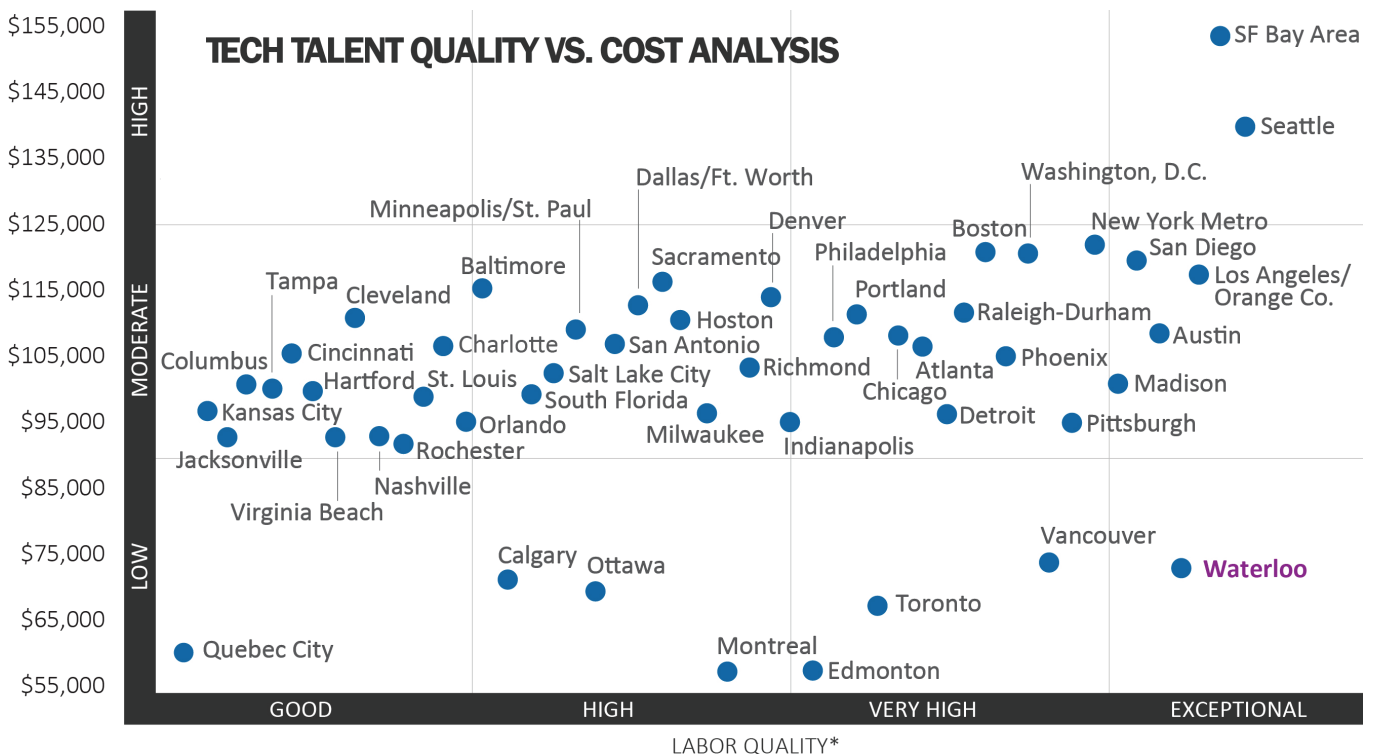


HIGHLY SKILLED LABOUR FORCE



EMPLOYMENT BY OCCUPATION, 2018

- Sales and Service Occupation
- Manufacturing, Trades and Transportation
- Business, Finance and Administration Occupations
- Education, Law and Social, Community and Government Services
- Management Occupations
- Other



Business Community

Waterloo is home to an exceptional, diverse and fast-growing business ecosystem. In our community, you'll find multinational companies working in technology, robotics and automation, advanced manufacturing and automotive, dozens of exciting scale-ups and over one thousand startup companies.

HERE ARE SOME OF OUR BUSINESS COMMUNITY'S ACCOLADES:

6 FASTEST-GROWING
TECH COMPANIES

Home to Canada's sixth fastest-growing tech companies

1ST

Canada's largest robotics and automation cluster

1ST

World's highest concentration of corporate innovation labs

2ND

Second-highest concentration of tech startups in North America

INTERNATIONAL



LOCAL



Target Cluster – Artificial Intelligence

WATERLOO: CANADA'S HOME FOR APPLIED AI

Waterloo's strong technology ecosystem, which includes autotech, cybersecurity, big data, Internet of Things (IoT), machine/deep learning, robotics and autonomous vehicles, puts us well ahead in the applied AI game. Researchers in Waterloo are developing intelligent systems that can detect life-threatening health issues, understand language and emotion, and navigate roadways and factory floors.

AT A GLANCE – WATERLOO'S AI ECOSYSTEM

University of Waterloo (UWaterloo) is a global leader in applied AI

- One of 4 universities selected to lead Amazon's Alexa Fund Fellowship program
- Key partner in the Government of Canada-funded SCALE.AI Supercluster initiative that will shape a new global supply chain platform

AI PhD's in Canada

The Toronto-Waterloo Corridor has the most AI PhD's in Canada and has committed to graduating 1,000 applied Masters students per year.

Increasing STEM Graduates

Graduates living in Waterloo are more likely to have studied STEM than anywhere else in Canada. Ontario is committed to increasing the number of graduates in STEM disciplines by 25% in the next five years.



INTERNATIONALLY RECOGNIZED AND LOCALLY SIGNIFICANT COMPANIES

INTERNATIONAL



LOCAL



Target Cluster – Robotics and Automation

WATERLOO: CANADA'S LARGEST ROBOTICS AND AUTOMATION CLUSTER

A legacy of manufacturing innovation, a reputation for technology leadership and a strategic location have made Waterloo a Canadian leader in robotics and automation. Home to Canada's top technology

university and industry giants like Toyota and Siemens, Waterloo has the talent pipeline and expertise needed to help robotics and automation companies innovate and grow.

WATERLOO'S ROBOTICS AND AUTOMATION SYSTEM

Significant Robotics and Automation Innovation Resources:

RoboHub

A state-of-the-art robotics research, testing and training facility, created to explore the potential of multiple robotic technologies.

Centre for Smart Manufacturing and Digital Innovation

An industry-driven applied research centre at Conestoga College focusing on High-Performance Manufacturing and ICT-Enabled Intelligent Manufacturing.

Catalyst137

A 475,000 square foot Internet-of-Things manufacturing space designed to help companies scale new ideas quickly. Tenants include Toyota, BorgWarner and Miovision.

Artificial Intelligence Institute

UWaterloo's artificial intelligence research centre with a particular focus on an application-driven approach to develop lightweight, compact AI that requires minimal computing power and has potential applications across industries.

World-Class Talent Pipeline:

University of Waterloo (UWaterloo)

#1 for computer science, engineering and mathematics and largest engineering school in Canada.

- Mechatronics Engineering
- Mechanical Engineering
- Electrical Engineering
- Software Engineering

Conestoga College

The only college in Ontario offering fully accredited engineering degrees. Programs include:

- Robotics and Industrial Automation
- Automated Manufacturing
- Mechanical Engineering
- CAD for Design and Manufacturing
- Applied Manufacturing Management
- Manufacturing Engineering

INTERNATIONAL



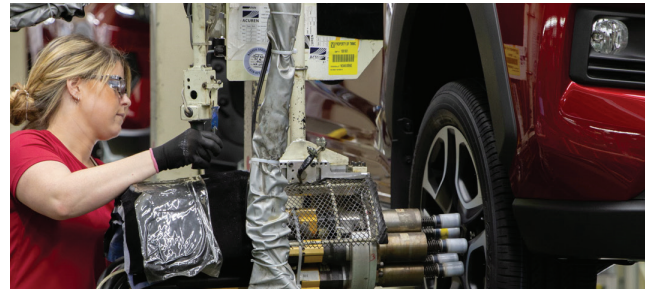
LOCAL



Target Cluster – Automotive Technology

WATERLOO: THE FUTURE OF AUTOMOTIVE INNOVATION

Waterloo has one of the world's deepest automotive R&D ecosystems that works in partnership with industry on groundbreaking technologies, including autonomous vehicles, intelligent systems, prototyping and software and automated manufacturing.



AT A GLANCE – WATERLOO'S AUTOMOTIVE TECHNOLOGY ECOSYSTEM

Quick Facts:

- Over 90+ automotive companies in nine different areas of automotive tech
- Home to Ford, Toyota and Bosch (ETAS/ESCRYPT) innovation labs
- Successful history of Auto OEM and Tier 1/2 suppliers
- Pioneer of autonomous vehicle R&D in Canada
- Over 1,200 tech startups founded in the past five years
- 4th highest concentration of tech talent in North America

Waterloo Centre for Automotive Research (WatCAR)

The largest university-based automotive research centre in Canada with over 125 faculty members involved in automotive R&D, including connected and autonomous vehicles, prototyping and software and powertrain and emissions.

Waterloo Intelligent Systems Engineering Lab

Industrial research in the safety, scope and architecture requirements of intelligent systems with a focus on autonomous vehicles.

Centre for Intelligent Antenna and Radio Systems

A world-class R&D environment for innovation in all aspects of electromagnetic communication and sensing science/engineering, including an outdoor test track for automotive applications.

INTERNATIONALLY RECOGNIZED AND LOCALLY SIGNIFICANT COMPANIES

INTERNATIONAL



LOCAL



Target Cluster – Financial and Business Technology

WATERLOO: PARTNER IN 2ND LARGEST FINANCIAL HUB IN NORTH AMERICA

With a long-established presence in the business and financial services sector, Waterloo has uniquely positioned itself as a leader in the ongoing convergence of the financial and technology sectors. A key player in the Toronto-Waterloo Corridor, home

to both the second largest financial sector and tech innovation corridor in North America, Waterloo is inventing the future when it comes to financial and business technology.

AT A GLANCE – WATERLOO’S BUSINESS AND FINANCIAL SERVICES ECOSYSTEM

Rich density of business and financial services hubs and incubators:

- Communitech’s Data Hub is Waterloo’s data-driven tech community focused on revolutionizing the way we leverage data
- Waterloo Research Institute in Insurance, Securities and Quantitative Finance (WatRisq) specializes in actuarial science, computer science, econometrics, finance and statistics risk management
- The Institute for Quantum Computing (IQC) creates cryptography encryption tools that are secure in a quantum world

Strong Financial and Business Community

Corporate Innovation Labs

Small-scale offices working on technological proof of concept and prototyping:

- TD Lab
- Manulife Innovation Lab
- Thomson Reuters Lab
- Deloitte Innovation Lab
- Interac Innovation Lab
- Wawanesa Innovation Lab
- Borealis AI (RBC Institute for Research)

Technology Offices

Large scale offices working on development:

- TD Bank Group
- Scotiabank FactoryU
- Deloitte

INTERNATIONALLY RECOGNIZED AND LOCALLY SIGNIFICANT COMPANIES

INTERNATIONAL



LOCAL



Target Cluster – Cybersecurity

WATERLOO: CYBERSECURITY AT THE CORE OF ALL INNOVATION

As pioneers in cybersecurity, Waterloo is continuously producing solutions to meet the security demands of a rapidly changing world. With a cluster of leading companies, internationally

renowned experts and an impressive research core, Waterloo is strategically positioned to lead in everything from automotive security to the emerging field of quantum cryptography.

AT A GLANCE – WATERLOO’S CYBERSECURITY TECHNOLOGY ECOSYSTEM

University of Waterloo is a Leader in Cybersecurity:

- UWaterloo is home to the Cybersecurity and Privacy Centre, Centre for Applied Cryptographic Research and the Cryptography, Security and Privacy Research Group
- Over 88 faculty experts in cybersecurity, privacy, quantum-safe cryptosystems and cryptography
- The world’s largest concentration of math and computer science talent with security courses embedded early in the curriculum

Pioneers in Quantum Threat Protection

Waterloo has the expertise and resources to help develop products to tackle the emerging quantum threat. It is the only community in the world with a complete quantum theory-to-commercialization ecosystem, with Perimeter Institute for Theoretical Physics, the Institute for Quantum Computing and Quantum Valley Investments within a 5km/3mi radius.

Communitech Data Hub

With a core focus on cybersecurity, Communitech’s Data Hub is helping data-oriented businesses – including startups, scale-ups, and enterprise – grow and revolutionize the use of data.

Unique IP Ownership Policies

The University of Waterloo’s unique IP ownership policies make it easier to transfer new research from top experts into new products with fewer barriers.

INTERNATIONALLY RECOGNIZED AND LOCALLY SIGNIFICANT COMPANIES

INTERNATIONAL



LOCAL



Innovation and Startup Ecosystem

Waterloo hosts the second most startups per capita in North America. It's also home to North America's highest concentration of corporate innovation labs. How does a mid-size city make this possible?

ENTREPRENEURSHIP IS IN OUR DNA

Startups and innovation in Waterloo stem from an ecosystem that emphasizes research, talent, commercialization support and collaboration.



COMMUNITY-WIDE SUPPORT STRUCTURE

Large collection of incubators and accelerators supporting student and serial entrepreneurs alike, with focuses on software, hardware, software-as-a-service, advanced manufacturing, security, quantum and more.

- Velocity
- Launchpad
- Grand Innovations
- Communitech
- Accelerator Centre
- Catalyst137
- Quantum Valley Investments
- Communitech Data Hub



TALENT

Waterloo has the fourth-fastest growing tech talent market in North America

- Home to leading engineering, math, polytechnic, business and co-op programs, Waterloo is a source of top job-ready talent



UNIQUE IP POLICY

The University of Waterloo has a “creator owned” IP policy that grants ownership to inventors. This helps them:

- Recruit the best faculty and students
- Commercialize research
- Work with companies to develop new technology/products



RESEARCH AND EXPERTISE

With 150+ leading research centres ranging from quantum computing and advanced cryptography to autonomous vehicles and advanced manufacturing, Waterloo has the world-class expertise and facilities to do cutting-edge research and development.



LIFESTYLE BUILT FOR STARTUPS

Waterloo's community has:

- Low cost of living compared to San Francisco, Boston or Toronto
- Access to major markets, including 187+ million customers within 1200km
- Multiple international airports within 100km
- Access to Toronto, beaches, wineries and Niagara Falls within 150km (93mi)



Quality of Life and Affordability

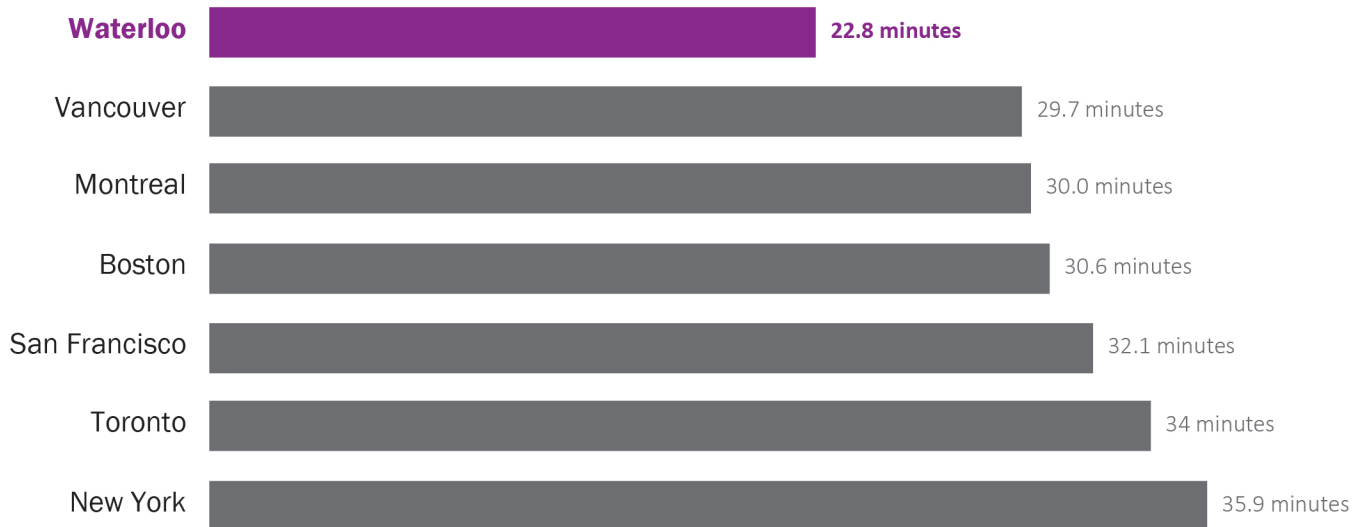
Locate in a community where your employees can get more for less.

HOUSING COSTS BY TYPE

	WATERLOO	TORONTO	VANCOUVER
Standard Two Storey	\$483,734	\$1,084,638	\$1,600,128
Detached Bungalow	\$436,254	\$750,812	\$1,068,356
Standard Condo	\$259,102	\$475,561	\$588,263
Aggregate	\$455,183	\$720,276	\$980,155

Source: Royal LePage National House Price Composite, 2020
 Values converted from CAD to USD using 2020 average conversion rate of \$0.75

AVERAGE COMMUTE (MINUTES)



Everything You Want – Right Next Door



WITHIN
30
MINUTES

- Hiking and trails
- Road bike routes
- Excellent restaurants



WITHIN
60
MINUTES

- Toronto – professional sports, world-class shopping, and tourist attractions including the CN Tower, Ripley’s Aquarium, and the Art Gallery of Ontario
- Stratford Festival – the world’s largest Shakespearean Festival
- Canada’s Largest Airport



WITHIN
120
MINUTES

- Niagara Falls
- Wasaga Beach – the world’s largest freshwater beach
- Blue Mountain Ski Resort

Waterloo EDC Services

WE ARE HERE TO HELP YOUR BUSINESS GROW AND SUCCEED

We are the first point of contact for companies looking to locate, relocate or expand in Waterloo. Our team builds and co-ordinates a customized program to connect you to the Waterloo ecosystem. Our complimentary concierge services include:

- Facilitating introductions to business leaders, customers and potential partners in our community
- Supporting local business retention and expansion opportunities
- Providing legal, tax and accounting connections to gather information on doing business in Waterloo, Canada
- Providing connections to Waterloo's renowned talent ecosystem, including three top-ranked post-secondary institutions
- Providing information on business and residential real estate opportunities
- Providing connections to assist executives and personnel in moving to Waterloo
- Providing information on available provincial, federal and other incentives
- Facilitating sector collaboration, partnership, information exchange and professional events



WATERLOOEDC
inventing the future

waterlootedc.ca [in](https://www.linkedin.com/company/waterlootedc) /WaterlooEDC [tw](https://twitter.com/WaterlooEDC) @WaterlooEDC

Waterloo Region Economic Development Corporation
151 Charles St. W, Suite 100, Kitchener, ON, N2G 1H6