

THINK INNOVATIVE TECHNOLOGY THINK DURHAM



Table of Contents



Meet Durham Region

3

Our Innovative Technology

4

Post-Secondary Focus

7

Ready for Business

17

The Ideal Location

18

Resources

19



Questions? Call Simon.

Simon Gill, Director, Economic Development and Tourism Division

Phone: 905-668-7711, ext. 2611

Toll-free: 1-800-706-9857 | Outside Canada: 001-905-668-7711

Email: simon.gill@durham.ca

www.investdurham.ca

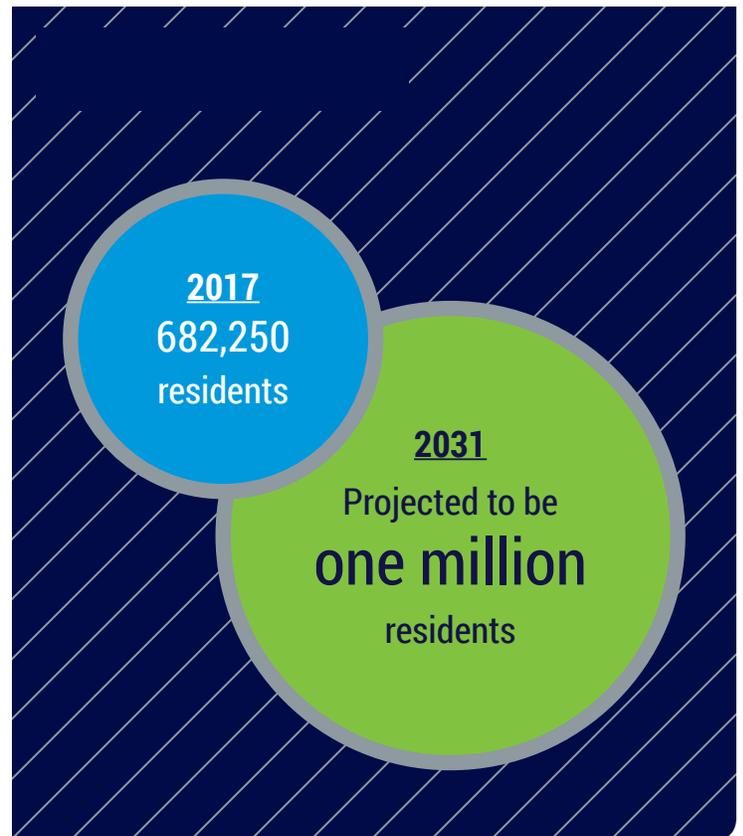
Meet **Durham Region**

A world-class location for Innovative Technology

Located on the eastern edge of the Greater Toronto Area (GTA), Durham Region's reasonable cost of doing business, skilled workforce, and high quality of life have combined to make it one of the fastest-growing regions in North America.

These attributes—in conjunction with an Innovative Technology-friendly business environment—have led to a prospering Innovative Technology sector that makes Durham Region an ideal location for the expansion or relocation of Innovative Technology businesses.

The rise of smart manufacturing technology, known as “Industry 4.0,” has created opportunities to advance traditional manufacturing activity. Numerous corporations in Durham have successfully implemented these cutting-edge manufacturing technologies and are investing in future improvements.



Innovative technology in Durham

The Region of Durham is embracing the development, adoption, and integration of innovative technologies within its businesses.

Innovative technology is no longer a separate industry. It has become an enabler and facilitator for virtually every company. The many new technologies that are accelerating business growth include:

- The Internet of Things (IoT)
- Big data
- Cloud computing
- 3D printing and visualization
- Robotics
- Cybersecurity
- Augmented and virtual reality
- Machine learning; and
- Artificial intelligence (AI)

These digital technologies are unlocking new discoveries in industries, such as materials science, nanotechnology, and biotechnology. They are transforming—even disrupting—nearly every sector.

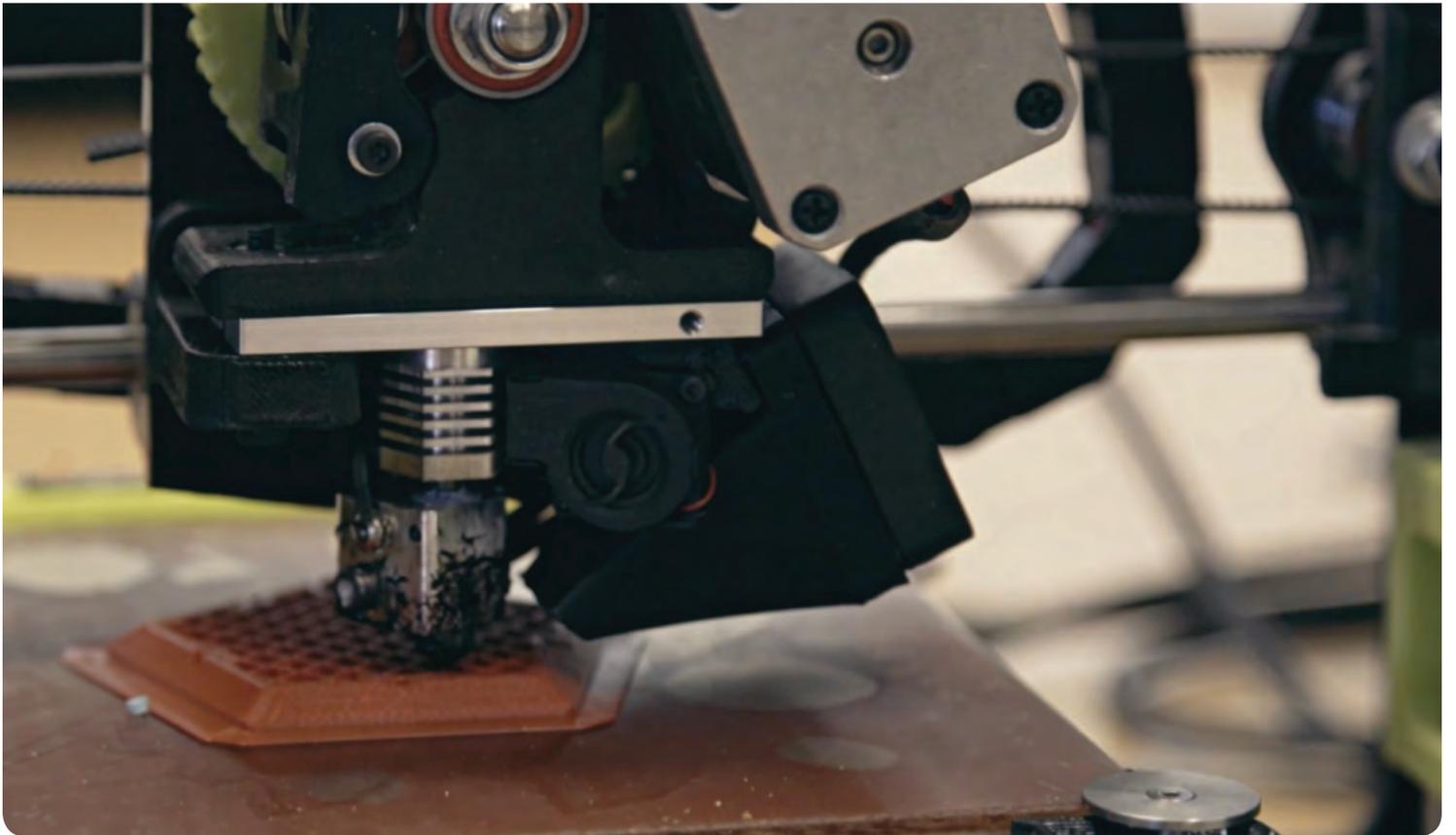
Innovative technology is resulting in emerging business models and transforming production in areas such as information technology,

manufacturing, precision agriculture, medical imaging, data mining, health informatics, and sophisticated simulations.

Durham, which is the eastern gateway to the Greater Toronto Area (GTA), is perfectly positioned to be a leader in the evolution of these new technologies because it has:

- Outstanding post-secondary institutions focused on innovative technology
- A highly educated labour pool with digital, engineering, science and innovation skills
- Municipalities and government agencies committed to fostering investment in new technologies
- Many companies already at the vanguard of technology advancements
- A cohesive innovative technology eco-system
- Proximity to the GTA's labour pool, markets, key service players, amenities and transportation infrastructure (e.g., Toronto Pearson International Airport)





A skilled labour force prepared for the future

Hundreds of technology companies and thousands of highly skilled, specialized professionals call Durham home. This experienced and educated labour force supports the demands of innovative technology companies at all levels, with workers who have the talent to compete in today's knowledge-driven economy.

Established expertise in training and attracting the next generation of professionals has been nurtured and enhanced in Durham with high-level post-secondary programming, research and development (R&D), and quality employers.

Companies also have access to talent across the GTA's labour force of 6.4 million people. This labour pool is fed by 44 colleges and universities across Ontario that produce approximately 36,000 graduates annually.



Education focused on innovative technology

In Durham, two post-secondary institutions—Ontario Tech University and Durham College—are widely recognized leaders in producing talent, conducting R&D, and collaborating with industry in the innovative technology sector.



Ontario Tech University

The university advances the discovery and application of new technologies through a technology-enriched learning environment and innovative market-driven programs responsive to the needs of students and industry.

The university combines business and information technology education, with its Faculty of Business and Information Technology offering the following programs:

- [Information Technology - Game Development and Entrepreneurship \(B.IT\)](#)
- [Information Technology - Networking and Information Technology Security \(B.IT\)](#)
- [Information Technology Security \(B.IT\)](#)
- [Information Technology Security \(M.ITS\)](#)
- [Networking and Information Technology Security - Advanced Entry \(B.IT\)](#)
- [Technology Management \(B.IT\)](#)

In addition, the University's Faculty of Science offers these technology-oriented programs:

- [Computer Science \(B.Sc\)](#)
- [Computer Science \(M.Sc\)](#)
- [Computer Science \(PhD\)](#)
- [Computer Science - Advanced Entry \(B.Sc\)](#)
- [Data Science \(B.Sc\)](#)
- [Modelling and Computational Science \(M.Sc\)](#)
- [Modelling and Computational Science \(PhD\)](#)

Examples of Ontario Tech's R&D efforts are its Gaming and Virtual Reality Laboratory and its Cave Automatic Virtual Environment. The Gaming and Virtual Reality Laboratory features motion capture facilities, an audiometric (sound) room, 3D scanners and software, and the latest in interaction devices. The Cave Automatic Virtual Environment boasts motion-tracking cameras that determine where a user is and how they are positioned, with projections rendered in stereoscopic 3D.

An example of Ontario Tech's collaboration with industry is its partnership with General Motors Canada to inspire the technological innovators of the future (particularly females) to pursue careers

in the fields of science, technology, engineering and math (STEM). This partnership involves several initiatives to provide students with a hands-on, interactive learning experience that demonstrates the real-world impact of STEM-based careers. More than 8,500 students will benefit from these initiatives over the next few years.



Trent University Durham GTA

Graduates equipped to take on the careers and challenges of tomorrow, academic programs created in response to the needs of our community, and leading faculty who bring their renowned expertise to the classroom – this is innovation at Trent University Durham GTA – and some of the reasons why Trent has been named the #1 undergraduate university in Ontario, eight years in a row.

Building on a tradition of academic excellence spanning over four decades in the east GTA, Trent University Durham GTA prides itself on challenging the way our students think. At Trent, leading academic programs with a common focus on innovation and social responsibility include:

- Bachelor of Business Administration - Accounting (B.B.A.)
- Bachelor of Business Administration - Information Systems & E-Commerce (B.B.A.)
- Bachelor of Business Administration - Marketing and Consumer Culture (B.B.A.)
- Business & Arts - Joint Major (B.A.)
- Business & Science - Joint Major (B.Sc)
- Computing Systems (B.Sc)
- Marketing & Entrepreneurship (Postgraduate Certificate)
- Master of Management (M.Mgt)
- Media Studies (B.A.)
- Policing & Community Well-Being (B.A.)



Durham College

Durham College has been named one of Canada's top 50 research colleges by Research Infosource, a Canadian R&D intelligence company.

Durham College's Office of Research Services, Innovation and Entrepreneurship has the goal of solving business and social challenges through innovation and collaboration. It works with industry partners to develop practical, pioneering solutions reflective of industry trends.

The Durham College Hub for Applied Research in Artificial Intelligence for Business Solutions (the AI Hub) offers industry partners access to technical expertise, state-of-the-art facilities and platforms, and student talent.

The college's School of Media, Art and Design is one of the leading schools of its type in Canada, with more than 1,800 digital media students.

Durham College's technology-related programs include:

- **Architectural Technology**
- **Computer Programmer**
- **Computer Programmer Analyst**
- **Computer Systems Technician**
- **Computer Systems Technology**
- **Information Systems Security – Computers and Networking (graduate certificate)**
- **Animation - Digital Production**
- **Contemporary Web Design**
- **Game - Art**
- **Interactive Media Design**

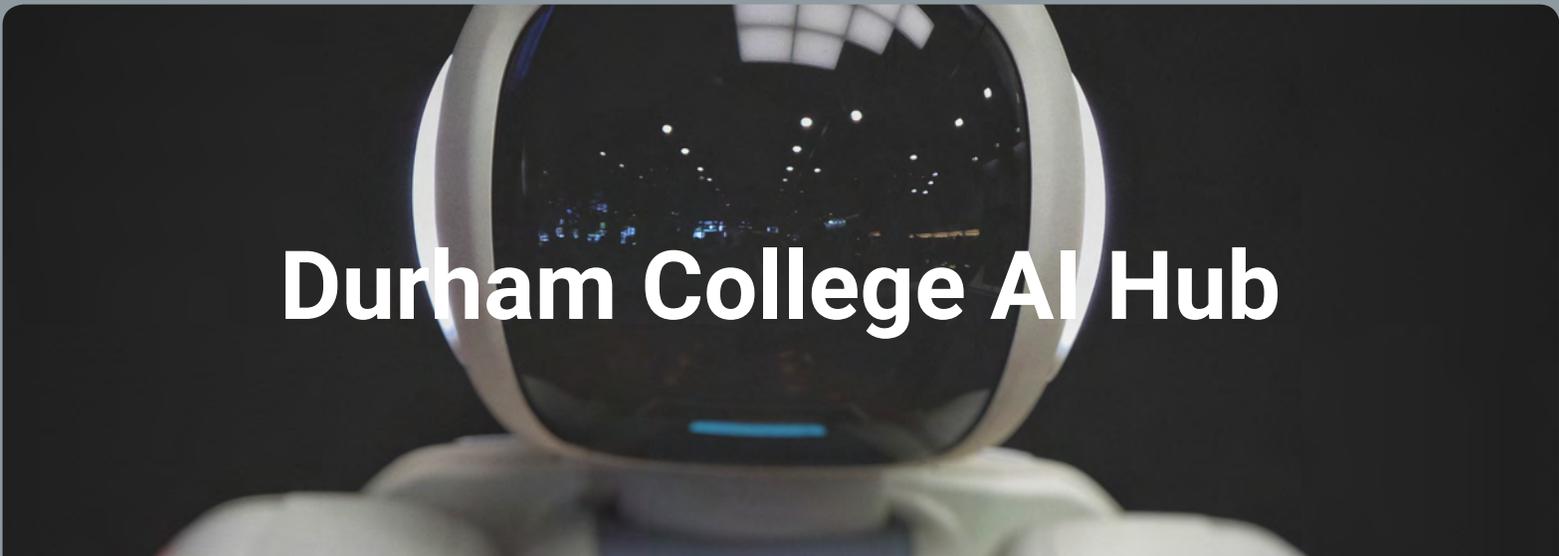




“

360Insights has been named the #1 best place to work in Canada

”



Durham College AI Hub



The AI Hub helps industry partners uncover business insights and develop intelligent autonomous solutions that increase productivity and growth.

The AI Hub engages with existing businesses and start-up ventures that are using advanced AI techniques and solutions to address practical business problems. It fulfills core business needs, including:

- Enhancing sales processes and creating revenue growth through AI-based sales systems
- Establishing, measuring, and improving customer sentiment, engagement, and market-segment performance
- Developing AI-based personalization and creating customized product and service delivery systems
- Developing natural language products that communicate needs and gather input with domain understanding and possibly prescriptive action recommendations
- Developing AI-based solutions that use medical data to predict health requirements allowing for make well-being recommendations
- Modelling AI system accountability, operating authorities and risk-management practices

The AI Hub also provides advisory and support services to enterprises considering how AI fits into their business. These services include workshops, seminars, printed and digital collateral, one-on-one meetings, and the development of customized training and information sessions



Where wisdom and insight are exchanged, and knowledge is created.



Government investment in innovation

The formation and growth of companies in the innovation technology sector are major priorities for the federal and provincial governments, which are making significant investments both as catalysts and partners.

The federal government is implementing a comprehensive multi-year plan to stimulate innovation through their Innovation Agenda which centres on three themes:

- Developing STEM talent with more work-integrated and continuous learning, and also greater participation by women and indigenous people
- Scaling up early-stage companies to become globally competitive
- Investing in selected high-value emerging technological areas, such as technology to combat climate change

Both the provincial and federal governments acknowledge that delivery must be largely through dynamic local on-the-ground entities. Durham Region is aggressively seeking to participate in new

initiatives, and it has consistently taken a leadership role in efforts to maximize the levels of provincial and federal government support.

Provincial government investment in the region includes the Spark Innovation Centre, which is one of 14 Regional Innovation Centres funded by the province and is also supported by the Region of Durham. Spark provides incubation and commercialization services to pre-revenue and early-stage-revenue innovative technology start-ups. In addition, it provides services to maturing technology companies to help them address scalability, market expansion and restructuring.

Spark leverages every asset of Durham Region's innovation industry, including the private sector, provincial and federal agencies, and talent producers, to deliver a truly experiential approach to developing the next technology sensations.



Industry embracing innovative technology

Numerous businesses in Durham Region are focused on innovative technology. Two of the leaders are [360Insights](#) and [Safran Landing Systems](#).

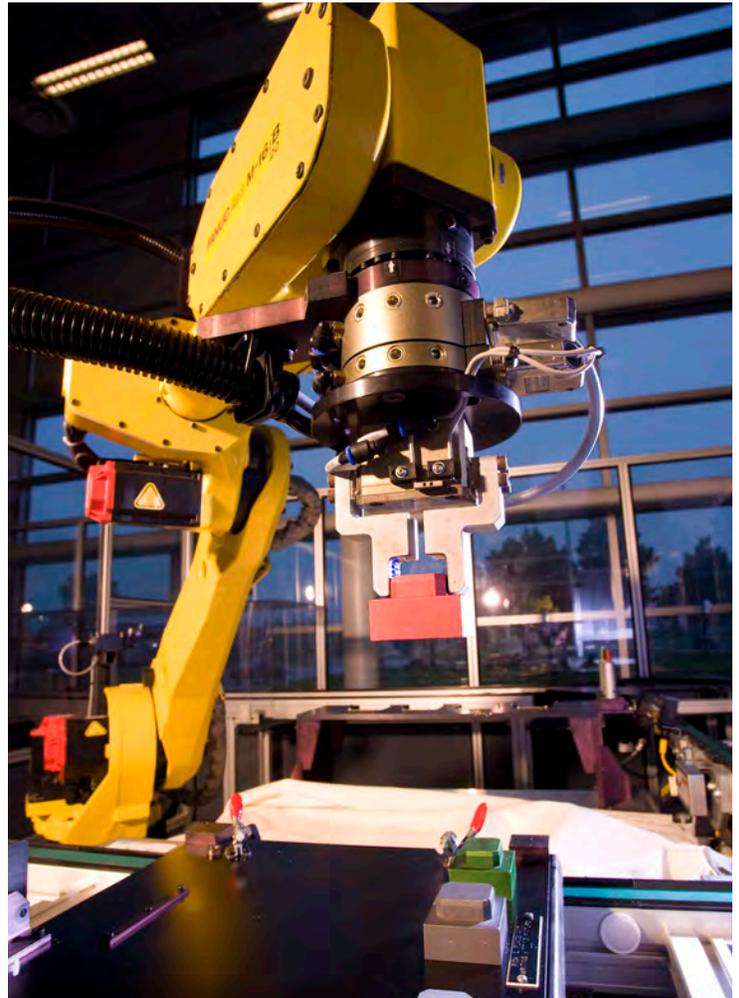
360Insights has been named the #1 best place to work in Canada.

360Insights provides a flexible software-as-a-service (SaaS) platform that enables companies to create, measure and manage incentive programs. This Channel Success Platform is used by over 100 brands and three million users globally.

The platform, which saves the company's clients more than \$50 million annually, allows clients to consolidate incentive programs into a single view, helps manage sales promotions, and provides 100 per cent auditing.

Innovation plays a pivotal role at Safran Landing Systems where a lot of time and energy is put into the research and development of new products, ensuring that the future generation of landing and braking systems will be lighter, quieter, more cost-efficient and robust.

Safran pioneered the introduction of carbon brakes, a revolution that has reduced weight compared to steel brakes by 50%. On key structural components of landing gear and systems equipment, they also use lighter composite and titanium materials and their weight reduction translates into direct fuel savings and lower CO2 emissions.



Other businesses using innovative technology in Durham Region include:

- [AECOM](#) (multinational engineering firm)
- [Ontario Power Generation](#) (Crown corporation wholly owned by Ontario that is responsible for approximately half of the electricity generation in the province)

- **Automotive Centre of Excellence** (Research and testing facility that offers chambers and technology for climatic, structural durability and life-cycle testing and includes one of the largest and most sophisticated climatic wind tunnels (CWT) on the planet.)
- **Search Engine People** (digital inbound marketing and SEO company)
- **Exlexicon** (municipal electric utility)
- **Real Tech** (provider of water-quality sensor and data-analytics solutions)
- **Global Emission Systems** (provider of emission-control technology that reduces smog and greenhouse gas emissions)
- **Besnovo** (developer of advanced industrial automation and laser de-coating solutions for aerospace industry)
- **Gordon Food Services Canada** (food-service supplier and food distribution company)
- **Lakeridge Health Education and Research Network** (hub for healthcare training, education, and research owned by Lakeridge Health)
- **Geekspeak Commerce** (provider of a wide variety of e-commerce product content services)
- **Girl Talk Empowerment** (developer of the next generation of female leaders, owned by Make Your Mark Enterprises Ltd.)
- **National ProStaff** (social network focused on fishing)



Gordon Food Services

Rich Wolowski, North American President and CEO

“Gordon Food Service first established a presence in Canada in the early 1990’s, and we have grown steadily to now operate coast to coast. The new Ajax facility further strengthens our position as the largest privately-held broadline distributor in Canada, and I’m excited about the opportunities this new facility will create for our customers across Ontario.”



One exciting initiative is bringing innovative technology, workforce development, post-secondary institutions, the private sector, and all eight municipalities of the region together to form a critical mass of innovation and knowledge—and to create the Durham Region of the Future.

The Durham Region Innovation District is a technology-led, innovation-anchored, regional strategy to drive innovation, investment, and job growth in Durham Region, and to re-imagine and re-position the region as the place where innovative people and businesses come to grow.

The District will encompass the geographic region of Durham Region and Northumberland County, and will act as a nucleus of innovation to connect the Eastern GTA to the entire Eastern Ontario innovation community.

The District will include the **Innovation Station**, a 60,000 square foot physical location offering centralized services, and a network of four in-market, niche sector-focused accelerators across the region: an **Advanced Technology Foundational Accelerator** that will link all accelerators together,

a **Nuclear Energy Innovation Accelerator**, an **Advanced Logistics Accelerator**, and an **Agri-Food Technology Accelerator**. The District will be connected to a national and international network of partners forming a virtual global network of innovators—the D-Hive Network.

This exciting initiative is expected to grow with the District's first two locations coming online. The Spark Centre— Durham's Regional Innovation Centre providing entrepreneurship support and incubation services to startups— has moved into a state-of-the-art, 10,000 square foot location in downtown Oshawa, and Whitby's 1855 Advanced Technologies Accelerator — has opened a 10,000 square foot brand new facility in downtown Whitby. The Innovation Station is expected to open in late 2020/early 2021.

People working together in a strong community with a shared goal and a common purpose can make the impossible possible.

— Tom Vignack

D-HIVE
DURHAM INNOVATION TECH HIVE
A Global Platform for Shaping Collaborative Innovation

spark* SPARK CENTRE SPARK CENTRE
sparkcentre.org



Ready **for Business**

With approximately 682,250 residents in 2017, forecasted to one million by 2031, Durham Region has one of the fastest growing populations in Canada.

Durham Region is composed of the cities of Oshawa and Pickering; towns of Ajax and Whitby; Municipality of Clarington; and townships of Brock, Scugog, and Uxbridge and is poised for continued economic growth. Manufacturing enterprises benefit from the expanding, technologically adept workforce. New business can easily develop mutually profitable relationships with existing businesses.

Through its proximity to the GTA—with a population of more than five million—Durham also offers prime access to Canada’s largest market and its key service providers, as well as to 135 million American and Canadian customers within a day’s drive.

Durham’s transportation infrastructure is made up of an integrated network of:

- Provincial and regional highways
- Cargo-loading and deep-sea shipping ports connected to the Atlantic Ocean via the St. Lawrence Seaway
- Transcontinental and commuter railway lines
- Local and international airports

In addition to innovative technology, Durham’s diverse economy includes strengths in:

- Agri-business
- Energy, environment, and engineering (EN3)
- Life sciences
- Manufacturing
- Professional and technical services
- Tourism

This sector diversification, educated workforce, affordable real estate and extensive transportation system have created an economy that’s thriving and is ready for continued growth.

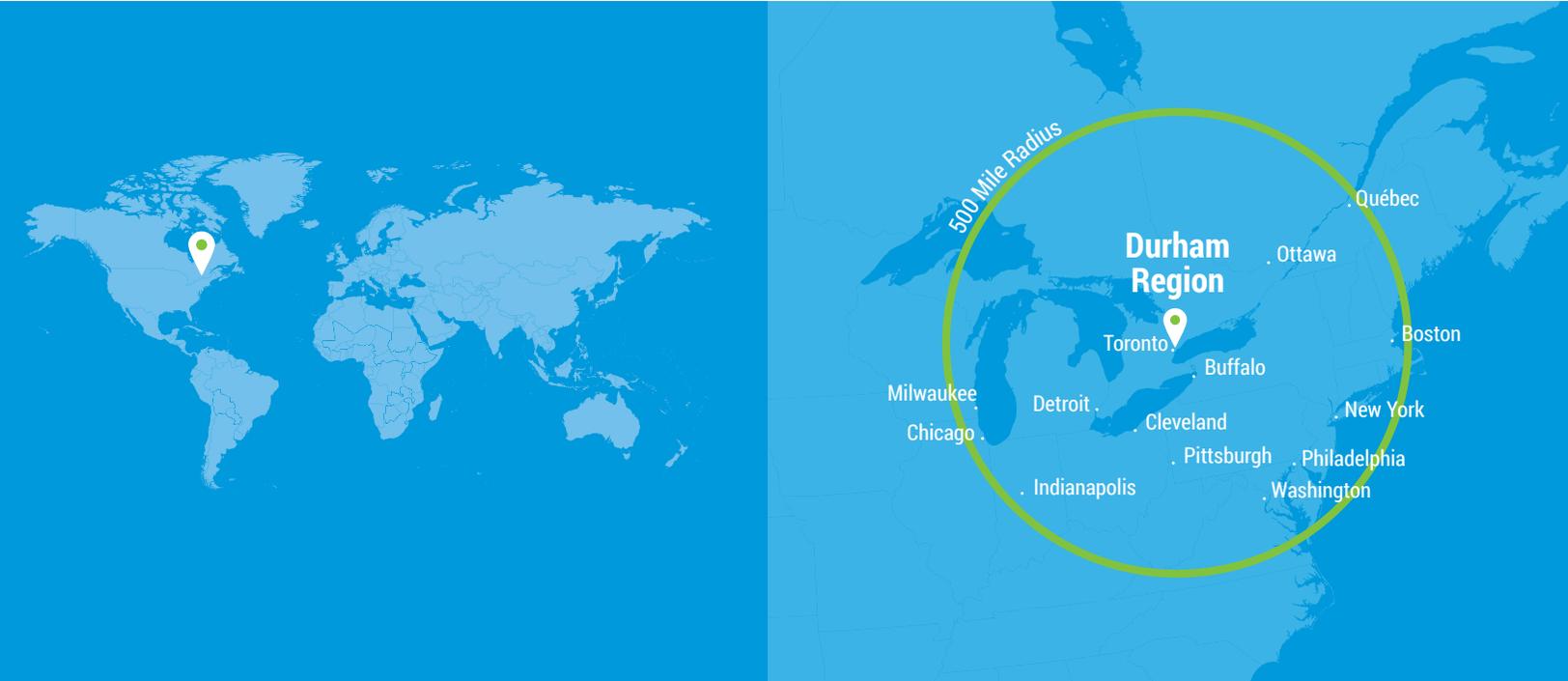


The Best of Both Worlds

With eight municipalities ranging from large urban centres to small towns, hamlets, and villages, Durham offers a rare, sought-after mix of cosmopolitan and rural living.

Access to ample green space, three lakes (Ontario, Scugog and Simcoe) and extensive urban amenities, Durham Region offers a high-quality standard of living for both city and rural dwellers.

The Ideal **Location**



Many **Resources Available**

Innovative technology businesses expanding or locating in Durham can collaborate with local organizations committed to helping businesses achieve growth and strategic development.



Spark Centre provides advisory services to early stage or growing innovation and technology companies. Executive coaching, functional advisory, co-location, incubation and day-to-day operational support are just a few of the services available.

Business Advisory Centre Durham (BACD)

provides business advisory services and guidance to individuals, entrepreneurs, start-ups and existing businesses in Durham Region.



Ontario Centres of Excellence (OCE) drives the development of Ontario's economy by helping create new jobs, products, services, technologies and businesses. In partnership with industry, OCE co-invests to commercialize innovation.

National Research Council of Canada Industrial Research Assistance Program (NRC IRAP)

offers technical and business advisory services, as well as funding programs, to help Canadian businesses build their innovation capacity, overcome barriers to growth, identify opportunities and turn great ideas into commercial success at home and abroad.



National Research
Council Canada

Conseil national de
recherches Canada



Let's Connect

Durham Region's Economic Development and Tourism Division loves nothing more than showing off our dynamic community.

Find out how Durham Region can work with you to achieve your business goals and aspirations by contacting us today. For questions and other inquiries, please contact **Simon Gill**, Director, Economic Development and Tourism at 905-668-7711, ext. 2611, by mobile at 905-903-5225, or simon.gill@durham.ca.

THINK BIG
THINK DURHAM

investdurham.ca



DURHAM REGION
ECONOMIC DEVELOPMENT
CANADA

