

GLOBALLY-RECOGNIZED CLUSTERS IN THE TORONTO REGION: AUTOMOTIVE R&D

THE TORONTO REGION IS ...

- The #2 automotive cluster in North America with large assembly plants for major OEM companies, including: General Motors, Toyota, Honda, Chrysler and Ford as well as the Canadian head office locations of 18 global auto manufacturers
- Location of a strong supplier base of more than 280 companies, including: ABC Group, ArcelorMittal Dofasco, Bridgestone/Firestone, Burlington, Denso Manufacturing Canada, Linamar Corporation, Magna International, Mahle, Martinrea International, Meritor Suspension Systems, Mobiletron Electronics, NTN Bearing Mfg., OMRON Dualtec Automotive Electronics, Showa Canada, TS Tech Canada, Tsubaki of Canada, Westcast Industries, Woco, Woodbridge Group, and Yazaki North America
- Home to 89 science and engineering university programs; 30 steel and materials science research institutes
- Producing a highly-educated and highly-skilled workforce – over 4300 graduates from engineering and science-related university programs in 2006
- A leading research location; for example, the region is ranked #4 in North America for new fuel technologies publications

ADVANTAGES

- A world-leading economic region – named one of the world's top 10 economic centres by Standard & Poor's in 2007, and ranked number two in Foreign Direct Investment magazine's 2007 Top City Regions of the Future
- 7.2 million people live in the Toronto Region, making it the 4th largest urban region in North America
- Strong government support through programs such as Ontario's \$1.15 billion Next Generation Of Jobs Fund (clean automotive and other green technology) and \$500 million Advanced Manufacturing Investment Strategy (AMIS)
- Canada's largest centre for research and education – location of 35% of all R&D conducted in Canada
- 1.8 million workers (25-64 years of age) with a university degree or college certificate – the most educated population in the G8 in terms of per cent of workforce (64%)
- Close to a well-developed transportation infrastructure – air, rail and highway corridors – that easily moves people and goods to cities in the US Midwest and Northeast

“Twenty years ago, Toyota management made two profound decisions. We decided to make a sweeping commitment to manufacturing in North America. And we decided that Canada would be a core part of that commitment.”

Katsuaki Watanabe,
Former President, Toyota Motor Corporation

WORLD-CLASS RESEARCH AND EDUCATION

- Toronto Region universities are a hub of research excellence recognized by the National Science and Engineering Research Council (NSERC):
 - 4 NSERC research chairs focused on automotive R&D
 - NSERC Industrial Research Chairs established for the Manufacturing of Composites in Automobiles
- A centre of advanced research and development based in Toronto Region universities, including:
 - **University of Waterloo:** Sustainable Energy Research; Waterloo Advanced Technology Labs (WatLabs); Waterloo Centre for Automotive Materials and Manufacturing (WatCamm); Waterloo Centre for Automotive Research (WatCAR); Waterloo Management of Integrated Manufacturing Systems (WatMIMS)
 - **University of Toronto:** Centre for Advanced Coating Technologies; Energenius Centre for Advanced Nanotechnology; Institute for Knowledge Innovation and Technology

Top 10 Publishers on New Fuel Technologies by Region (2000-08)

		Number of Publications
1	California	1531
2	Michigan	1183
3	Pennsylvania	1047
4	Toronto Region	947
5	Massachusetts	805
6	Illinois	793
7	New York	706
8	North Carolina	395
9	New Jersey	385
10	Connecticut	382

Source: ISI

- CAN-MET, the federal government's Materials Technology Laboratory research centre is slated to move to McMaster Innovation Park in 2010

- **McMaster University:** Brockhouse Institute for Materials Research; Centre for Advanced Polymer Processing & Design; Centre for Electrophotonic Materials & Devices; Centre for Mechantronics and Hybrid Technologies; Centre for the Effective Design of Structures; General Motors of Canada Centre for Automotive Materials and Corrosion; Initiative for Automotive Manufacturing Innovation; McMaster Institute for Automotive Research and Technology; McMaster Institute for Polymer Production Technology; McMaster Institute for Transportation and Logistics; McMaster Manufacturing Research Institute; Metal Forming Laboratory; Steel Research Centre
- **York University:** Institute for Research and Innovation in Sustainability
- **University of Ontario Institute of Technology:** Automotive Centre of Excellence

WEB LINKS

Toronto Region Research Alliance
www.trra.ca

McMaster University
www.mcmaster.ca

York University
www.york.ca

University of Toronto
www.utoronto.ca

University of Waterloo
www.uwaterloo.ca

University of Ontario Institute of Technology
www.uoit.ca

Brockhouse Institute for Materials Research
www.brockhouse.mcmaster.ca

Centre for Advanced Coating Technologies
www.mie.utoronto.ca/labs/cact/

Waterloo Centre for Automotive Research
www.watcar.uwaterloo.ca

Canadian Materials Technology Laboratory
www.nrcan.gc.ca/mms/canmet-mtb/mtl/default_e.htm

CONTACT INFORMATION:

Michael Williams, Senior Vice President,
 Investment Attraction

Tel: 1 416 673 6676
mhwilliams@trra.ca