



Downsview Aerospace
Innovation & Research

Current Canadian Aerospace Industry



- Comprised of 817 companies and employs 170,000 people nationwide. It generates \$41 billion in revenue.
- Between 2007-2012, Research and Development (R&D) investment increased by 41% resulting in a productivity growth of 19%.



Economic Imperative



- Demand for new airplanes is valued at **\$4.8 trillion between 2013 and 2032**. Countries are positioning themselves to capture as much of this market as possible.
- Although Canada has had past success in the aerospace industry, the global market is becoming increasingly aggressive.

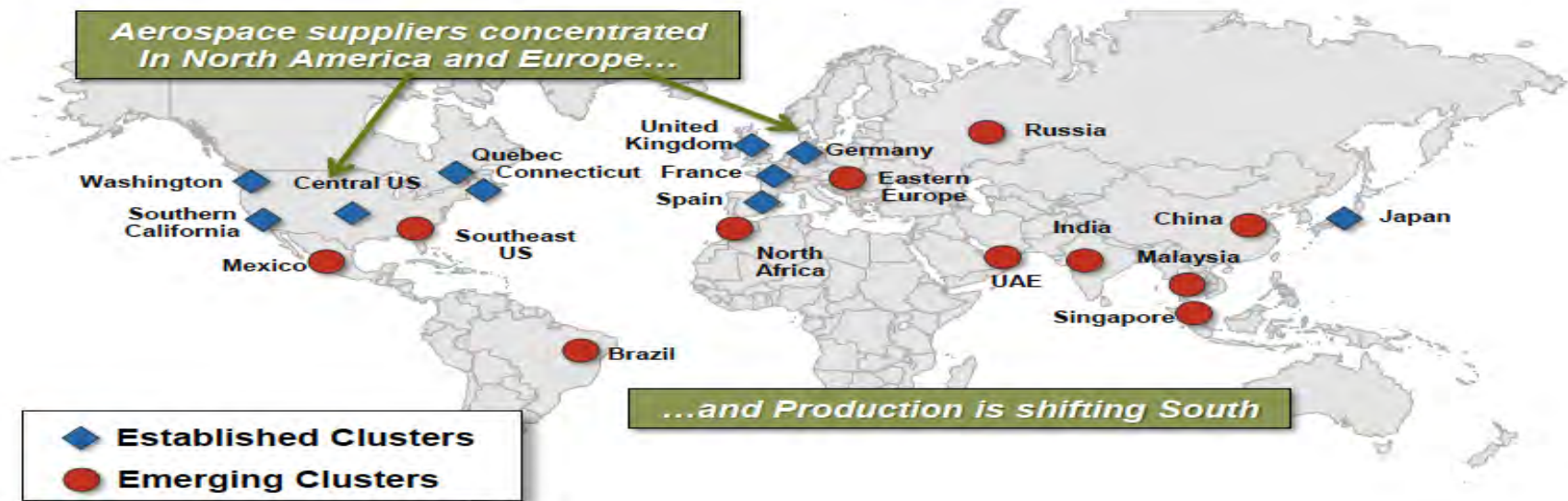


Global Clusters



Globalization 2.0 Is Driving New Aerospace Manufacturing Clusters In The South

Global Aerospace Manufacturing Clusters



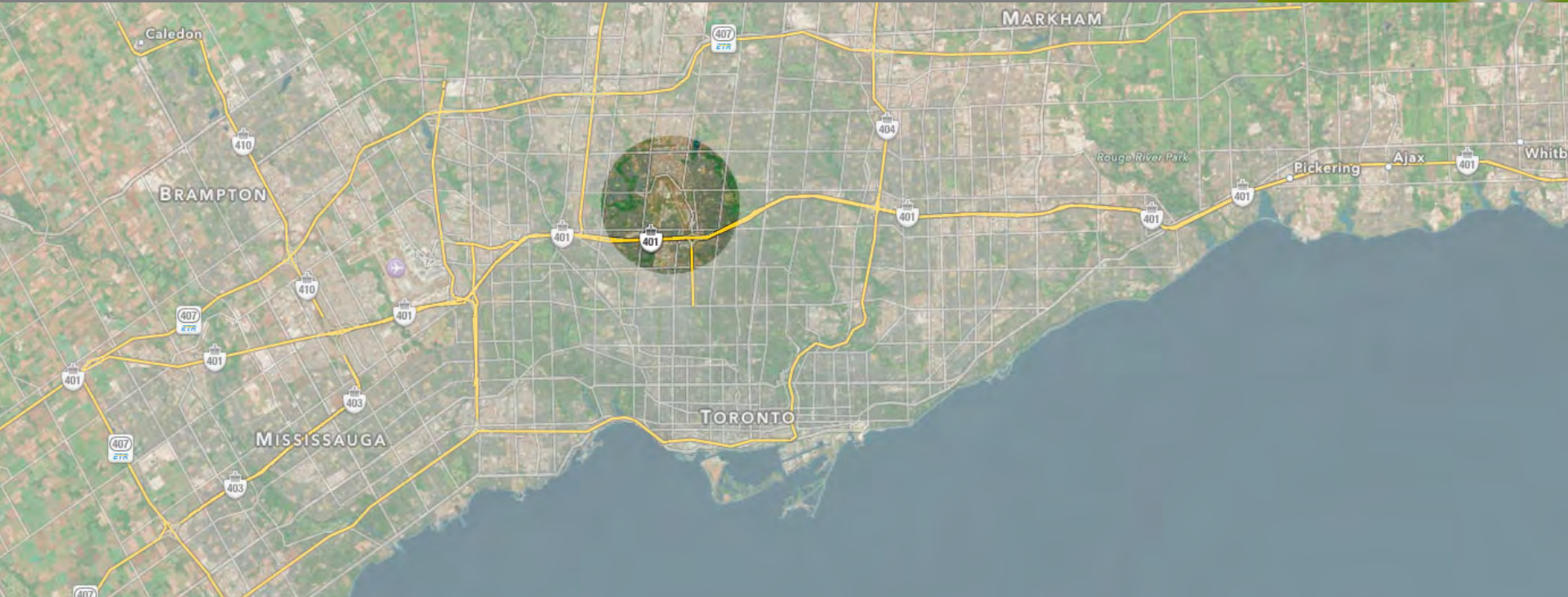
Emerson Report (Aerospace Review)



- The 2012 Emerson Report stated that co-location of colleges, universities, technology transfer centers, and aerospace firms to a single cluster or hub is an effective strategy of increasing aerospace sector competitiveness....
- to establish an aerospace campus at the Downsview Park site.



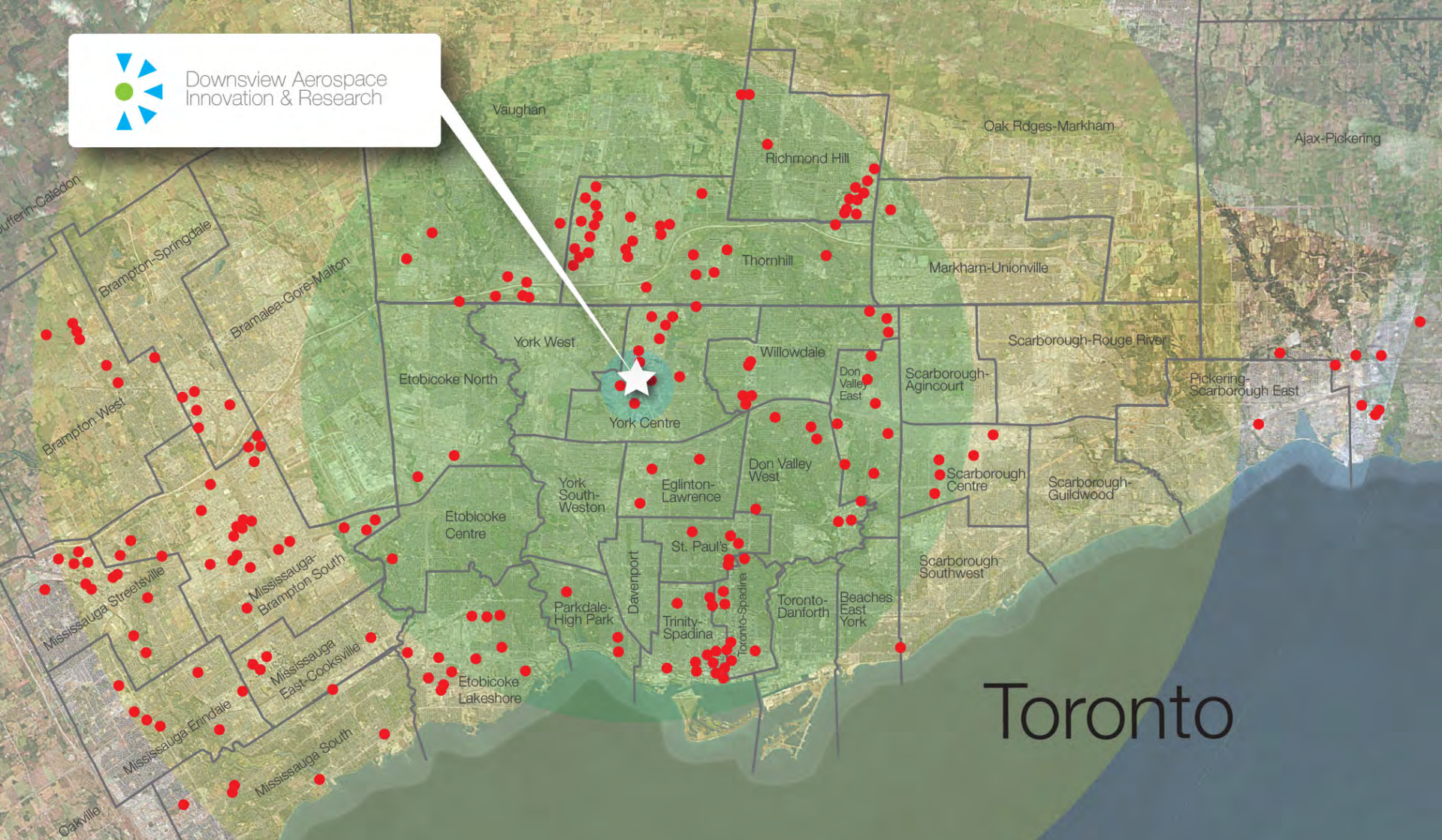
Downsview Aerospace Hub: Optimal Location (Image of GTA)



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Downsview Aerospace Hub



- Federally owned land
- Bombardier facilities
- Public transit
- Innovation Centre
- Centennial College
- UTIAS
- DRDC



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Strategic Vision



Dow
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The Campus



Front Entrance



Main Hangar



Downsview Aerospace Innovation and Research (DAIR) Consortium



In 2012, an industry association of all of the large aerospace companies and leading postsecondary education institutions in the GTA combined their efforts to form the Downsview Aerospace Innovation and Research (DAIR) Working Group.

This group has been brought together with a mandate of facilitating a collaborative research and training framework in support of developing an **Aerospace Training and Research Hub at Downsview Park.**



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The DAIR Consortium



Industry members:

- Bombardier Aerospace (Toronto)
- FlightSafety (Toronto)
- Honeywell (Mississauga)
- MDA (Brampton)
- Messier-Bugatti-Dowty (Ajax)
- Pratt & Whitney Canada (Mississauga)
- UTC Aerospace Systems (Oakville)

Representing more than 9000 direct jobs in the GTA



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The DAIR Consortium



Academia members:

- Centennial College
- UTIAS (UofT)
- Ryerson University
- York University

Representing approximately 1500 current aerospace students in Ontario with potential to double



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The DAIR



Government Representatives (observers):

- City of Toronto
- Ministry of Economic Development, Trade & Employment of Ontario
- Industry Canada
- Department of National Defence
- Defence Research & Development Canada
- National Research Council



The DAIR Objectives



- Creation of an international hub which will build on current aerospace Ontario core capabilities and complement Quebec and Winnipeg clusters activities
- Generation of R&D activities and synergies with the global aerospace industry
- Provide infrastructure for co-location and cost sharing thereby reducing R&D investment risk for industry and partners



The DAIR Objectives



- Provide access to R&D infrastructure and help SMEs move up the supply chain
- Provide space for Technology Demonstrators projects and a National R&D Network
- Build on potential for collaborative R&D with auto-sector
- Attract direct foreign investments



Creation of an Aerospace Research and Innovation Centre



At the heart of the hub, an Aerospace Research and Innovation Centre will bridge industry-academia partnerships. It will catalyze new research and development initiatives, primarily by offering a shared space to house offices of various industry, academic, and government organizations, small and medium-sized enterprises (SMEs), experimental and test facilities, and space for technology demonstrators.

The hub will be anchored by the campuses of Centennial College Aerospace and the University of Toronto Institute for Aerospace Studies (UTIAS), as well as Bombardier's facilities*.



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Project Description



- Aerospace Innovation Center
 - Collaboration offices from various industry, academic, research, government organizations and SMEs
 - Shared experimental test facilities (National Research Council, Defence Research & Development Canada)
 - Location for technology demonstration projects
 - Support for national R&D Network
 - Facilitation services, equipment sharing
 - Promotional and marketing activities
 - Ryerson to build 7000 sq. feet facility
 - Start construction of the Innovation Center summer 2018



Project Description



The Innovation Centre acts as the bridge and catalyst to the Hub's evolution



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DAIR Business Case: Project Benefits



- KPMG Economic Impact Study

Table 3 - Summary of sustainable job creation resulting from the Downsview Aerospace Hub

<i>Job creation</i>			
	Low	Medium	High
Sustainable jobs created, at year 20	3,400	7,400	14,400



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Your Opportunity



To learn more about DAIR and their initiatives, please contact:

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The Opportunities are Endless!



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