Industry Canada Industrie Canada

Think Aerospace.
Think Canada.

An Investment Opportunity
February 2006

Canada

The Canadian aerospace and defence sector is a strong performer

- One of the largest producers in the world
- Gross sales of $21.7 billion in 2004
- Canada’s leading advanced technology exporter – 84% output exported
- Total employment: 73,000
- Number of firms: over 400
- Invested $1 billion in R&D
- Well-integrated into the global aerospace industry

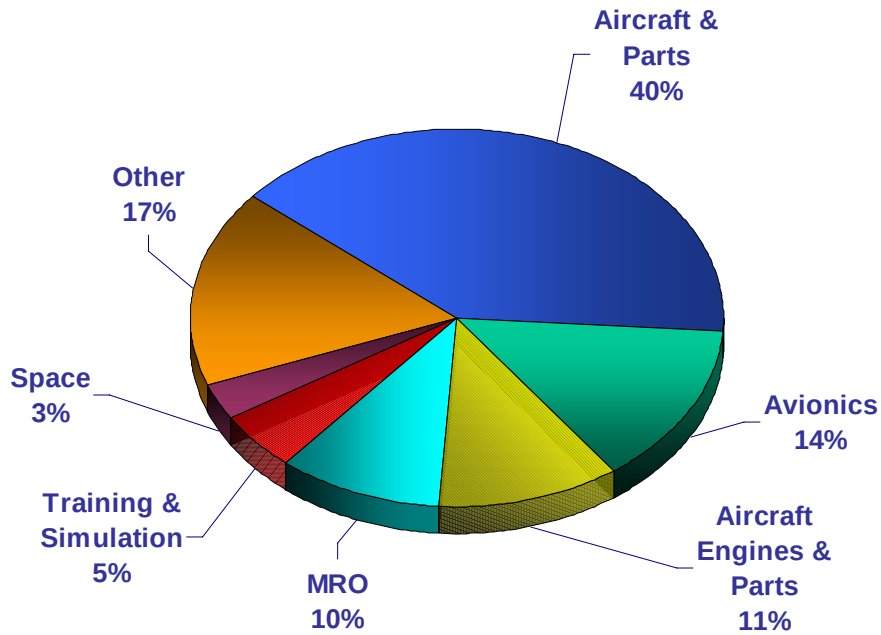
Source: Aerospace Industries Association of Canada

Source: Aerospace Industries Association of Canada

Presence in all major product segments

- A particular strengths in commercial aircraft and dual-use electronics
- A strong aerospace and defence service industry
- Extensive repair and overhaul activities. More than 1,000 Aircraft Maintenance Organizations (AMOs) in Canada with a comprehensive range of capabilities in:
  - complete aircraft, helicopters, engines and accessories, avionics, systems and components

Canada's Aerospace and Defence-Related Products (2004)



Source: Aerospace Industries Association of Canada

The industry has proven leadership in key segments

	World Market Share
 20-90 seat Regional Aircraft	47%
 Small Gas Turbine Engines	34%
 Commercial Flight Simulators	80%
Visual Simulation Sector	70%
 Civil Helicopters	14%*
 Landing Gear	31%
New Large Aircraft Landing Gear	60%
 Transport aircraft environmental control systems	60%
 Space robotics and imaging	N/A

Source: Aerospace Industries Associations of Canada
* TEAL

Aerospace leaders have chosen Canada as a good place for doing manufacturing and R&D

Canadian

- BOMBARDIER
- CAE
- HÉROUX DEVTEK
- MAGELLAN AEROSPACE CORPORATION

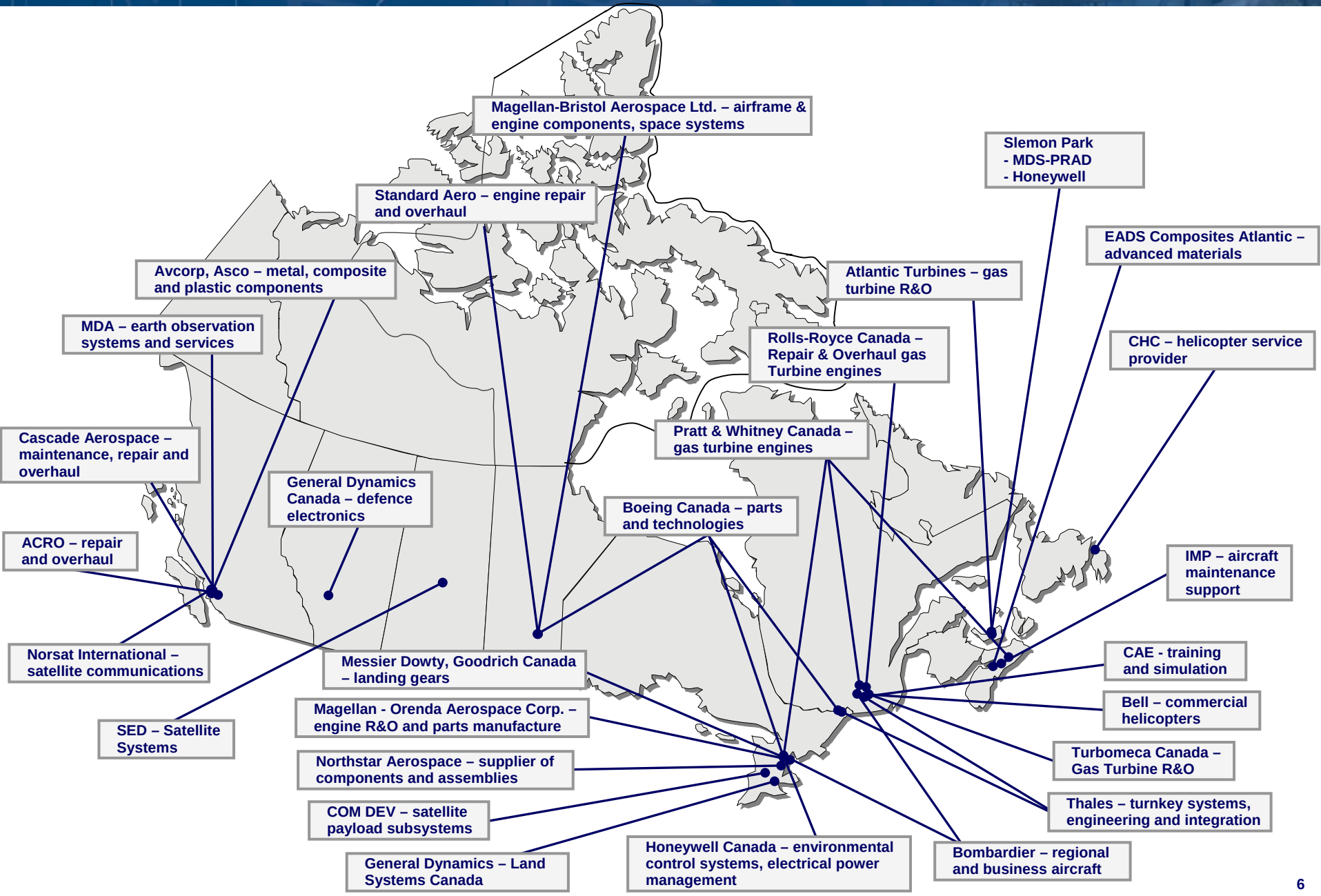
American

- Bell Helicopter TEXTRON
- BOEING
- GENERAL DYNAMICS Canada
- GE
- L3 communications
- GOODRICH
- Honeywell
- LOCKHEED MARTIN
- Pratt & Whitney Canada A United Technologies Company
- Raytheon

European

- asco
- EADS
- Messier-Dowty snecma group
- ROLLS ROYCE
- snecma
- SONACA NMF CANADA
- THALES

An integrated industry that operates across Canada with a competitive network of SME suppliers



Canadian-based companies offer business opportunities

- **Team with Canadian-based multinationals, including:**
  - **Bombardier Aerospace – third largest commercial airliner manufacturer**
  - **Pratt & Whitney Canada – small gas turbine power for the world**
  - **CAE – corners the commercial flight simulator market**
  - **Bell Helicopter Canada – one of the world's leading commercial helicopter manufacturer**

- **Access capabilities of companies that supply the OEMs, e.g.:**
  - **Avcorp – Winner of a Gold Award for entrepreneurial achievement at the Canadian Productivity Awards**
  - **Haley Industries – one of the world's most technologically advanced foundries**
  - **NMF Canada – world leader in processing large, machined wing panels**
  - **Magellan – leading global supplier of technologically advanced aerospace systems and components**
  - **Standard Aero – world's largest independent small gas turbine engine and accessory repair and overhaul facility**
  - **Spar Aviation Services – one of only 11 Lockheed-approved C-130 Maintenance and Modification Centres.**
  - **Composites Atlantic – advanced composite components for commercial aircraft, space structures, rocket motor cases, etc.**

Leading edge space companies

- **World-leading capabilities**
  - space robotics and moveable spacecraft antennas (EMS and MD Robotics)
  - many space microwave subsystems (COM DEV)
  - turn-key earth observation data receiving, processing, archiving and distribution (MDA)
  - Satellite communications systems consulting (Telesat)
  - Synthetic Aperture Radar (MDA)

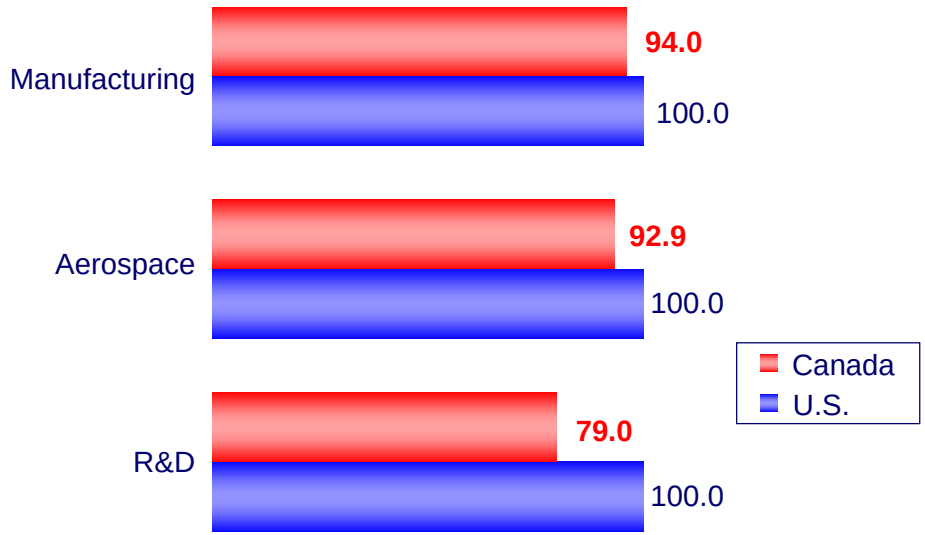
- **Strategic International Partnerships**
  - USA (NASA) partner for over 3 decades - from Alouette to RADARSAT
  - special relationship with the European Space Agency for over 2 decades
  - only non-European country with quasi-associate status
  - extensive bilateral cooperation with other European and Asian countries

- **Larger export proportion than other space-faring nations**

Business costs in Canada are highly competitive…

- **KPMG international business cost comparison study indicates that Canada's cost advantage over the U.S. is :**
  - **6% for manufacturing;**
  - **7.1% for aerospace;**
  - **21% for R&D.**
- **Companies in Canada have specific cost advantages in:**
  - **labour and benefits;**
  - **construction / start up; and**
  - **many annual operating expenses such as office rents, utilities and corporate income tax.**

Business Costs Advantage by Type of Operation
(Index: US = 100)

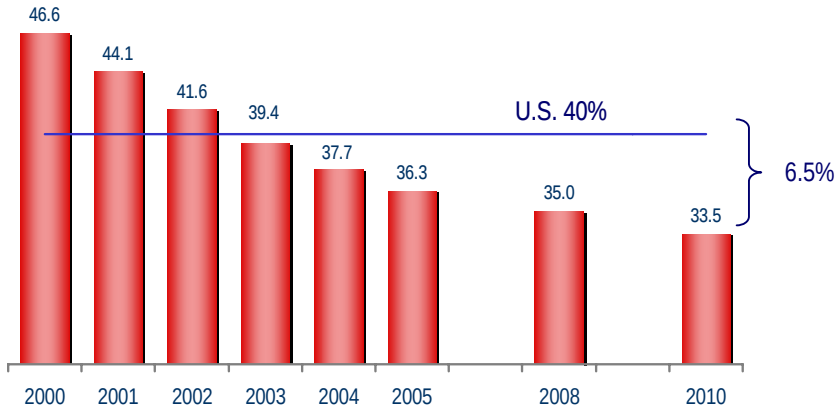


Source: KPMG, The Competitive Alternatives G-7 Edition (2004)
* Index based on after-tax cost of startup and operation over 10 years.

… and we have competitive corporate taxes

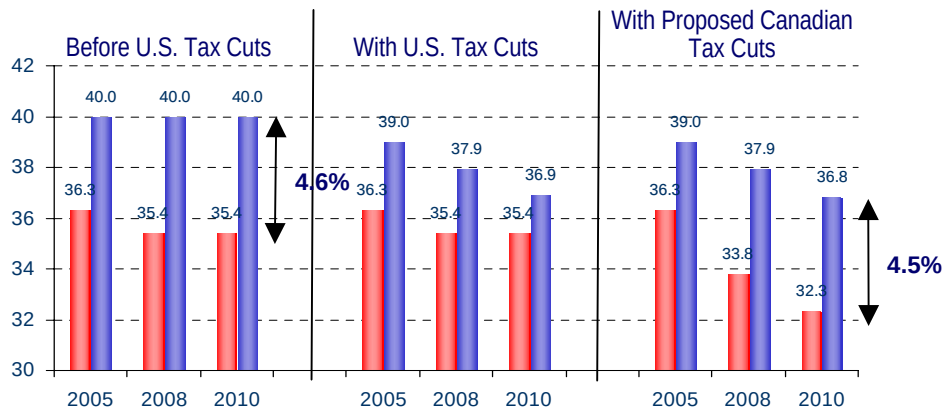
- **Canada's compares well internationally in terms of statutory corporate income tax rates.**
- **Fiscal measures introduced in recent federal budgets will provide Canada with a statutory tax rate advantage over the U.S. of 4.5 percentage points for manufacturing and 6.5 percentage points for non-manufacturing by 2010.**

Corporate Income Tax Rates (%)
(Large Non-Manufacturing Enterprises)



Source: The Federal Budget, Finance Canada, February 23, 2005
Combined average federal-provincial and federal-state corporate tax rates including capital tax equivalents. Excludes reduced rates of provincial tax on manufacturing and processing activities and the tax rate reductions for manufacturing activities contained in the American Jobs Creation Act of 2004. Includes proposed tax reductions contained in the 2005 budget

Corporate Tax Rates in Canada and the U.S. – Manufacturing Income (%)



Source: The Federal Budget, Finance Canada, February 23, 2005
Combined average federal-provincial and federal-state corporate tax rates including capital tax equivalents.

Low wages cost and turnover rate

- **KPMG 2004 business cost study found that Canada's average labour cost in 2003 were significantly lower than comparable American costs.**
- **Turnover rates in Canada are lower – this means reduced training, hiring and separation costs.**

Occupational Wages — Knowledge Workers, 2003

Full-time, full-year wages* ($U.S. PPP)**

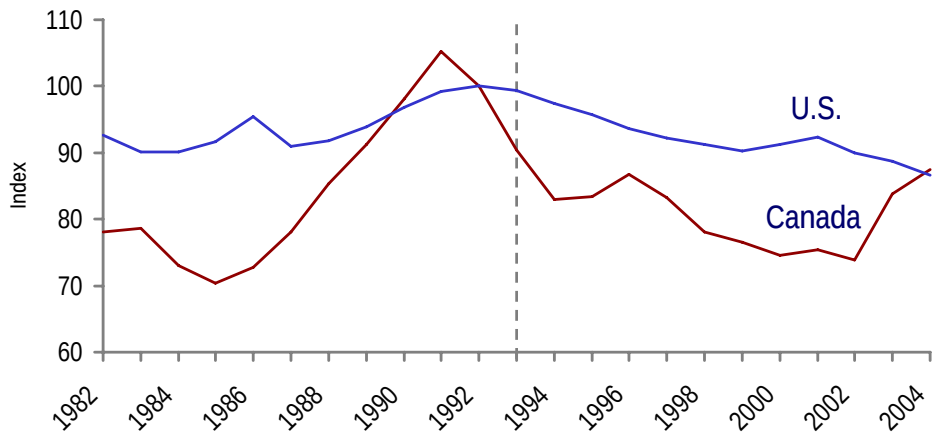
Aerospace Engineers	$55,283	$76,530
Mechanical and Electrical Engineers	$52,258	$68,792
Computer Scientist	$44,453	$68,186
Mechanical Technicians	$38,230	$47,025
Machinist	$33,973	$38,563

*** Canadian data have been converted to full-year assuming a 52-week work year.**
**** Canadian wages converted to U.S. dollars using Purchasing Power Parity rate of US$1.22.**

Source: Statistics Canada and U.S. Bureau of Labour Statistics, 2003

Manufacturing Unit Labour Cost Index US$ Basis

(Index 1992 = 100.0)



Source: U.S. Department of Labor, Bureau of Labor Statistics, December 2005

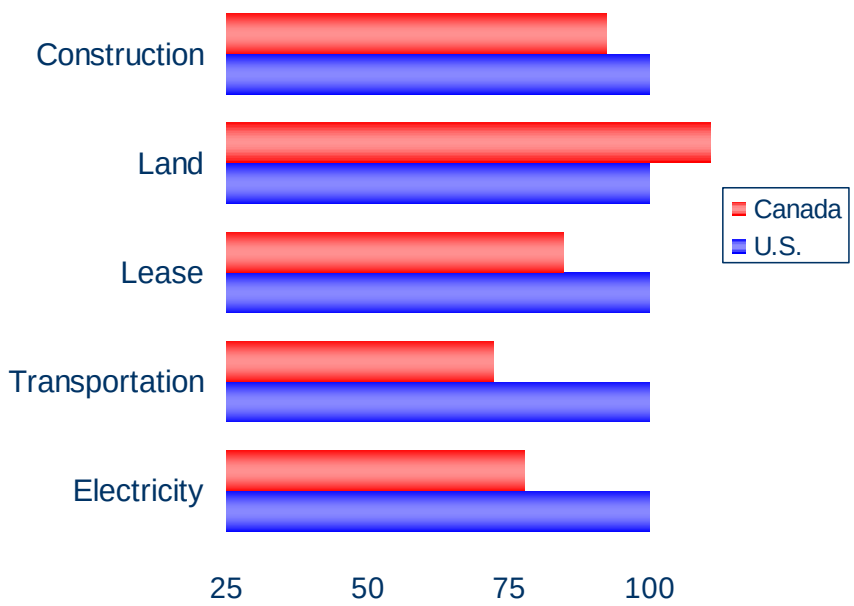
Lower Capital and Operating Expenses

When compared to the U.S.:

- **construction costs are 8% lower in Canada;**
- **land costs are comparable;**
- **office lease costs are 15% less, including utilities, taxes, insurance;**
- **transportation costs are 28% lower for manufacturing industries; and,**
- **electricity costs are 22% less for industrial users.**

Comparison of Selected Business Costs*

(Index: US = 100)

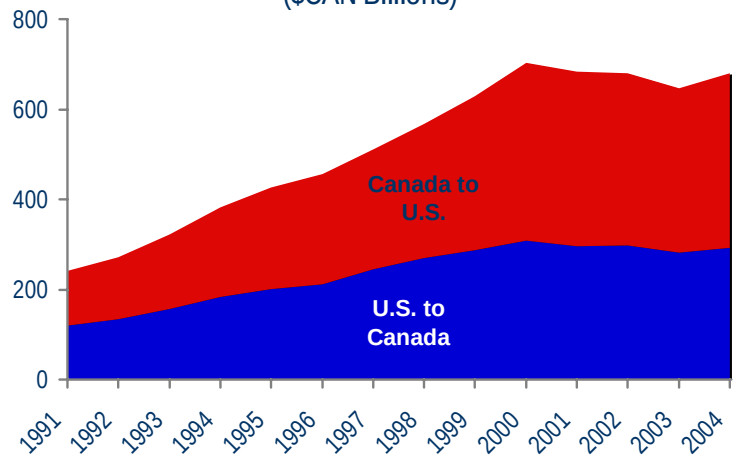


Source: KPMG, The Competitive Alternatives G-7 Edition (2004)
* For more see www.CompetitiveAlternatives.com

Canada is an integrated part of the North American market

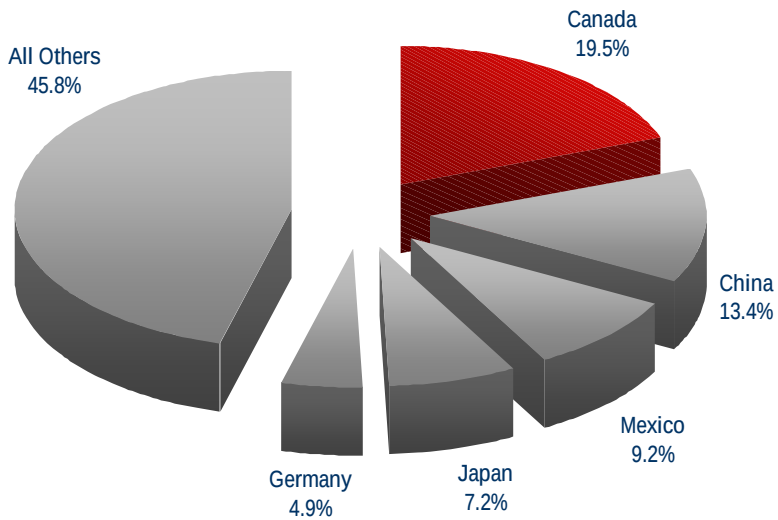
- **Canada and the U.S. have the world's largest trade partnership, with two-way trade in goods and services amounting to CAN$680 billion in 2004. This averages too more than CAN$1.3 million dollars a minute in trade.**
- **The U.S. trades more with Canada than with any other country—more with Canada than with all of the E.U. countries combined!**
- **The U.S. market accounts for the majority of Canadian aerospace and defence exports – more than 77% output exported around the world.**
- **Boeing alone purchased over $800 million from Canadian companies.**

Canada - U.S. Trade in Goods & Services
($CAN Billions)



Source: Statistics Canada

Distribution of U.S. Trade* - 2004



Source: World Trade Atlas * Merchandise trade

Unique access to the U.S.

- 60 percent of the U.S. population lives within a two hour flight from Montréal and Toronto.
- An important share of the Canadian aerospace and defence industry output is attributed to subsidiaries of US firms operating in Canada – a high level of cross-border integration, which provides easier access to global markets.
- Canada has easy access to the U.S. market
  - NAFTA
  - For U.S. military purchases, Canada is part of the North American Defence Industrial Base
  - Special trade agreements facilitate participation in US military projects
    - Defence Production Sharing Agreement
    - Defence Development Sharing Agreement
    - Specific exemptions under US International Traffic in Arms Regulations (ITARs)

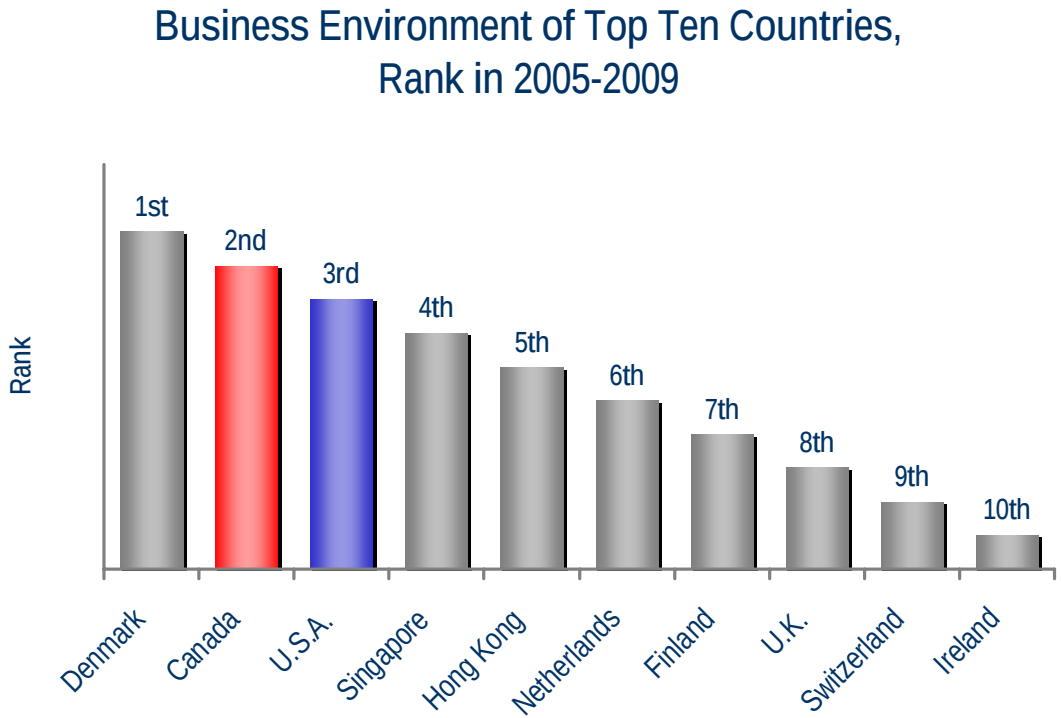
Aerospace leaders have chosen Canada because it's business climate is among the world's best

- **Canada understands the importance of its business community and has created an environment to encourage its success.**

- **Improved conditions for growth:**
  - **Budget surplus**
  - **Tax regime**
  - **Low inflation**
  - **Low interest rates**
  - **Trade policy / market access**
  - **Innovation policy**

- **Canada ranked second in the Economic Intelligence Unit's global business rankings for the forecast period (2005-09), down slightly from first place from the historical period (2000-2004).**

- **Canada holds a 4.2% (CDN .82=$US) aerospace cost advantage over the United States.**



Source: The Economist Intelligence Unit, March 2005

Investing in Research and Innovation

The Canadian government is helping to build the 21st century economy by developing policies and programs that will make Canada one of the most innovative countries in the world.

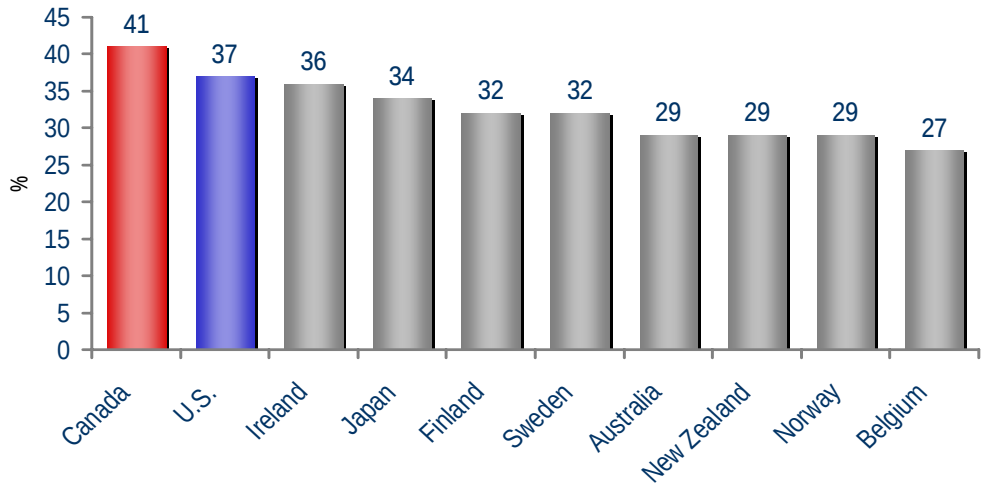
Research and Innovation is a Federal Priority:

- National strategy to make Canada a global leader in the knowledge economy
- Goal to be among top five countries for R&D
- Investing in skills / highly qualified personnel
- 2003 Federal budget adds $1.7 billion in spending over three years
- Build a technology-enabled, knowledge-based economy, Canada has invested $13 billion in research since 1997
- Provinces play a strong role in funding programs for innovation
- In partnership with industry and academia

Canada's aerospace industry has a superior quality workforce

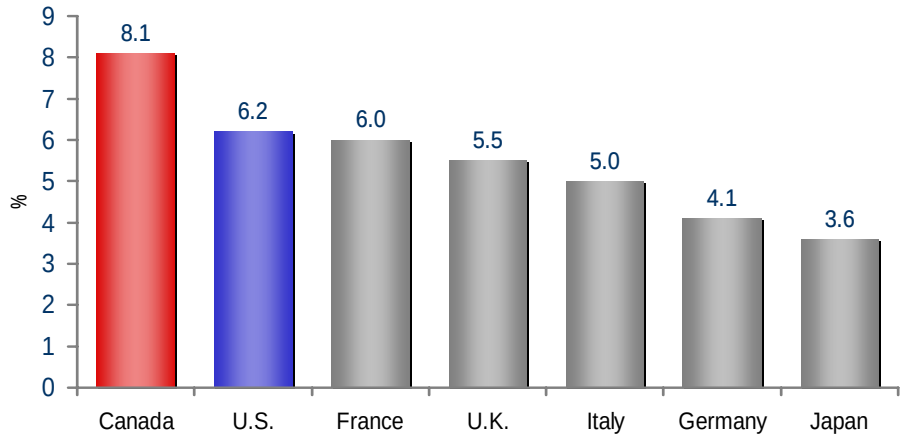
- **The overall skill level of Canada's workforce ranks high among competing countries.**
- **According to 2001 Census figures, Canada has the highest percentage of individuals, among OECD member countries, achieving at least college or university education.**
- **Canada also leads its major competitors in terms of the share of GDP that is devoted to public education.**

Higher Education Achievement



Source: 2001 Census, Statistics Canada

Public Expenditure on Education

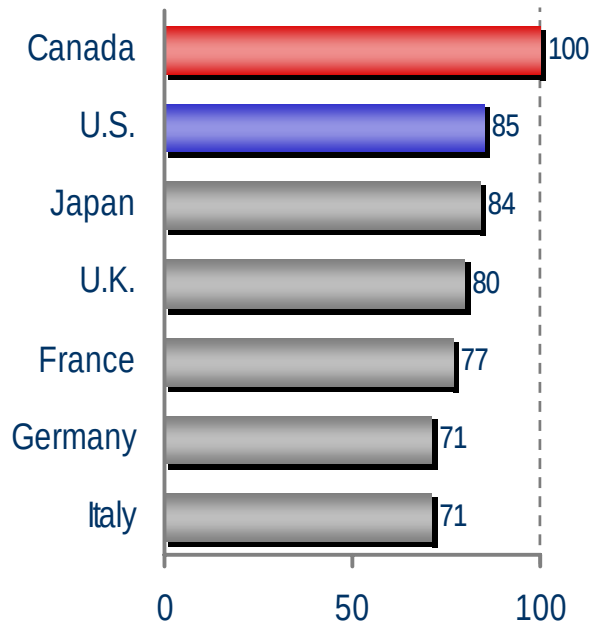


Source: IMD, World Competitiveness Yearbook 2005

Canada has a strong competitive R&D infrastructure

- **Canada offers the most favorable tax treatment for R&D among the G-7:**
  - **Canada provides a system of tax credits and accelerated tax deductions for a wide-variety of R&D expenditures.**
  - **Eligible costs include:salaries, overhead, capital equipment, and materials.**
- **These federal and provincial tax-based incentives permit firms to significantly reduce R&D costs through direct investment or sub-contracting in Canada.**
- **Strong capability in advanced technologies**
- **Large pool of scientific and engineering personnel**
- **Wide range of research facilities**
- **Strong technology collaboration between universities and industry**

Relative Generosity of R&D Tax Incentives*
(Index: Canada = 100.0)



Source: Warda, Jacek, Rating Canada's R&D Tax Treatment: A 2003 Update, October 2003, forthcoming for Industry Canada
Note: Relative generosity is determined by dividing the after tax cost of performing $1.00 of R&D by 1 less the corporate tax rate.
Results are indexed to the relative generosity of Canada's system of tax-based support for R&D. The higher the ratio the more competitive the tax system.
* Does not include Ontario's new Corporate Income Tax Rates * U.S. provisions extended through December 31, 2005

Canada's Scientific Research and Experimental Development (SR&ED) tax credit is highly attractive

	Canada	United States
Eligible Cost	✓ Total cost of contracted R&D eligible, when contract is at arm's length	× Only 65% of R&D costs eligible
	✓ Capital equipment, overhead, process R&D, salaries, and materials	× Only salaries and materials
	✓ Equipment costs qualify	× Equipment costs do not qualify
	✓ Canada's R&D tax credits do not require incrementality. Also, investment tax credits earned may be used to offset taxes payable.	× Only year-over-year incremental costs are eligible
	✓ Research funded by non-residents qualifies	× Research funded by non-residents does not qualify
	✓ Option to claim tax credits on proxy	× No option for using proxy amount
Deferral of claim	✓ Without limit	× Restricted
	✓ Offers landed immigrant status to specialists involved in R&D, resulting in faster formation of international R&D teams; also spouses are permitted to work	× Neither is the case

http://www.ccra-adrc.gc.ca/sred

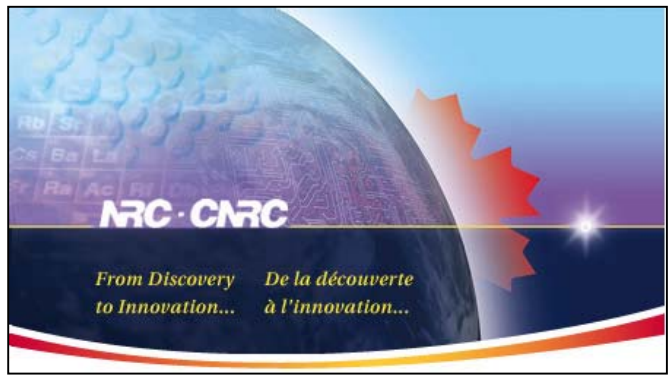
Government Programs Relevant to Aerospace Industry

- **Technology Partnerships Canada (TPC)** — **http://tpc.ic.gc.ca**
  Risk-sharing partner in technology development
- **Industrial and Regional Benefits (IRB)** — **http://strategis.ic.gc.ca/aerodef_e**
  Industrial participation in Crown procurements
- **National Research Council (NRC)** — **http://www.nrc-cnrc.gc.ca/**
  - **Institute for Aerospace Research –** Aerospace R&D and testing
  - **Aerospace Manufacturing Technology Centre (AMTC) –** Facilitate next generation manufacturing
  - **Industrial Research Assistance Program (IRAP) –** Support for SMEs
- **Canadian Space Agency (CSA)** — **http://www.space.gc.ca/asc/index.html**
  Space Technologies Development Program
- **Scientific Research and Experimental Development Program (SR&ED)**
  Tax credit available for R&D activities — **http://www.ccra-adrc.gc.ca/sred**
- **Defence Industry Research Program** — **http://www.drdc-rddc.dnd.ca**
  Support for industry-initiated research
- **Export Development Canada** — **http://www.edc.ca**
  Export financing and insurance services
- **Canadian Commercial Corporation** — **http://www.ccc.ca**
  Guarantees contract performance for Canadian exporters, especially for sales to governments
- **Granting Councils and Research Foundations –** Support university research
  - **NSERC** — **http://www.nserc.ca**
  - **Canada Foundation for Innovation** — **http://www.innovation.ca**

Technology Infrastructure: National Research Council of Canada

- Institute for Aerospace Research is one of 17 NRC institutes providing support in national standards, information technologies and manufacturing

- NRC Institute for Aerospace Research is Canada's national laboratory for aerospace research and development:
  - 280 full time employees + 100 guests workers
  - Annual budget of $35M
  - Locations in Ottawa and Montreal

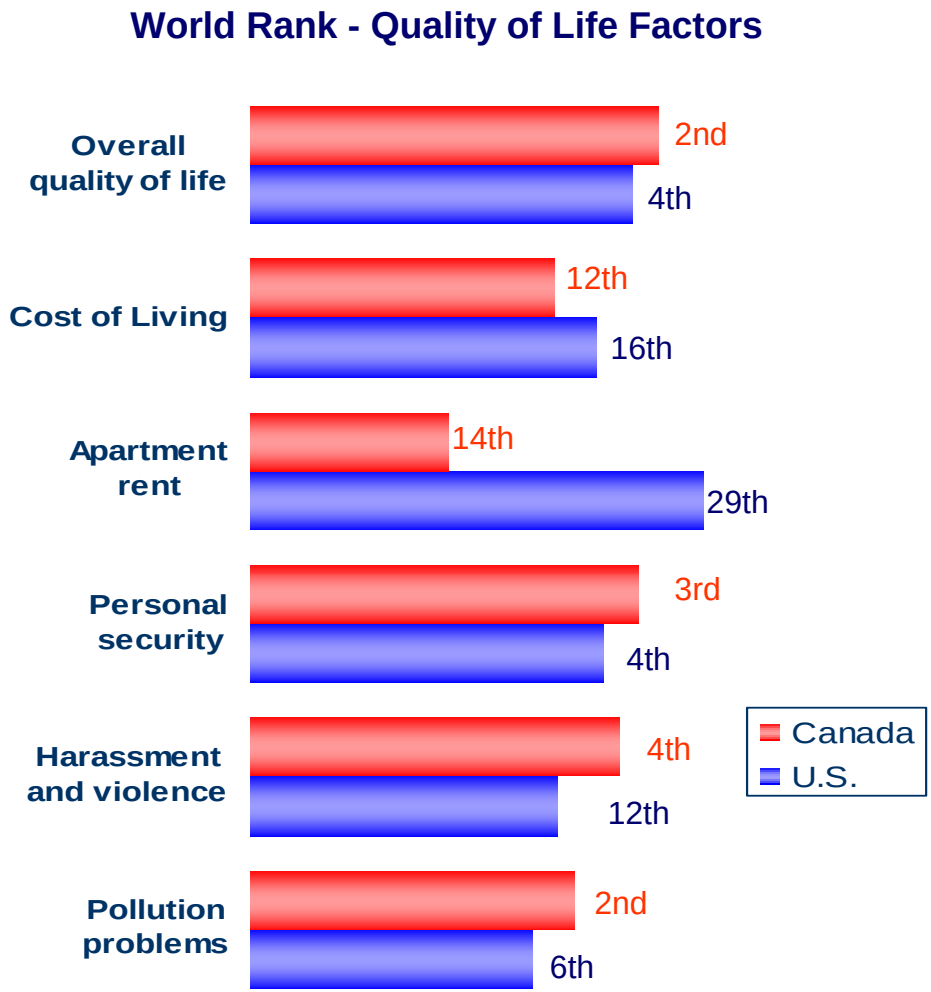


- R&D expertise and facilities in:
  - Aerodynamics
  - Flight Research
  - Structures, Materials and Propulsion
  - Manufacturing Technology

- The Institute for Aerospace Research offers:
  - Access to technical expertise and information
  - Access to national test facilities and data bases
  - Cost-shared programs with Canadian and foreign aerospace firms

Canada is a great place to live – safe, clean and inexpensive

- Among major producing nations, Canada:
  - has the highest quality of life;
  - has the second lowest cost of living and the lowest apartment rents;
  - is among the safest places to live and do business; and
  - is among the least affected by pollution.
- Other Canadian advantages include:
  - high-quality, low-cost education;
  - universal health care;
  - cosmopolitan cities; and
  - diverse cultural and recreational amenities.



Source: IMD, World Competitiveness Yearbook 2005
*figures indicate World Ranking

For more information contact:

- **Industry Canada (Aerospace)**

  http://strategis.ic.gc.ca/aerodef_e

  email: aerodef.strategis@ic.gc.ca

- **Invest in Canada**

  http://investincanada.gc.ca

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