

Adapting to Climate Change

The financial impacts of climate change

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OF CANADA



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D'ASSURANCE
DU CANADA

Who is IBC?

- Trade association representing Canada's private home, car and business insurance companies
- Over 200 Companies
- \$20 billion in claims paid
- 104,000 employees
- \$35 billion in premiums

The business of insurance

- Risk management tool to protect assets for sudden and unforeseen events
- Cover residences, cars and businesses
- Spread the financial risk
- Players:
 - Primary insurers
 - Re-insurers

Role of insurance

- Provides vital underpinning to society and to economic growth.
- Enables individuals & businesses to assume risks that would otherwise be excessively onerous
- Assists individuals and businesses to take more intelligent risks without burdening governments and society

What Canadian insurers cover...

- Homes
 - Standard: Fire, theft, vandalism, wind damage.
 - Endorsement: Sewer back-ups
- Businesses
 - Standard: Property damage from named perils
 - Standard: General liability
 - Endorsement: business interruption, floods
- Liability Insurance
 - Municipal
 - Professional groups

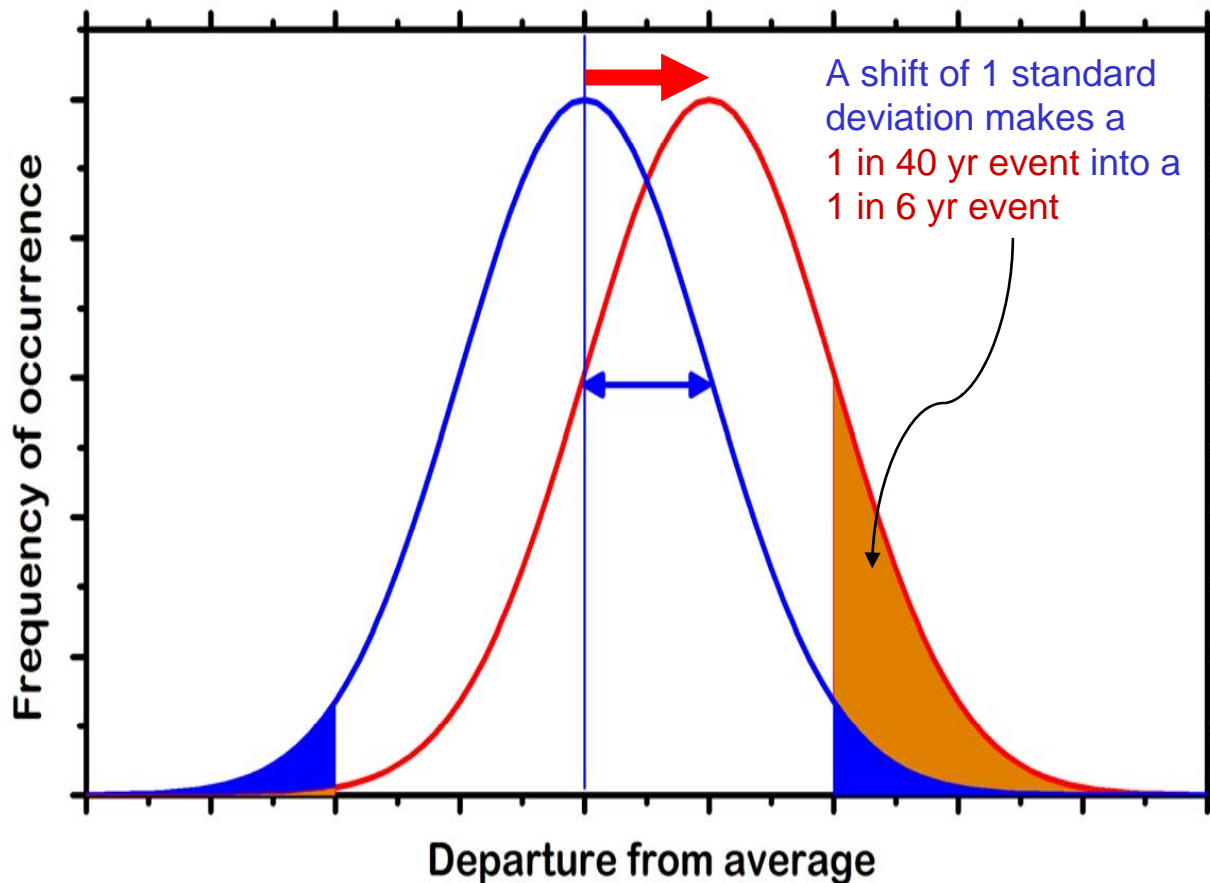
Coverage is triggered by events

- Weather-related (atmospheric)
 - Often the trigger for other risks such as forest fires, infrastructure failures etc.)
- Geological
 - Earthquakes
- Human induced
 - Chemical spills, terrorism (commercial only)

Climate Change greatest challenge

- More severe weather more frequently
- Mid- to long-term potential issues of availability and affordability of insurance

Frequency expected to increase



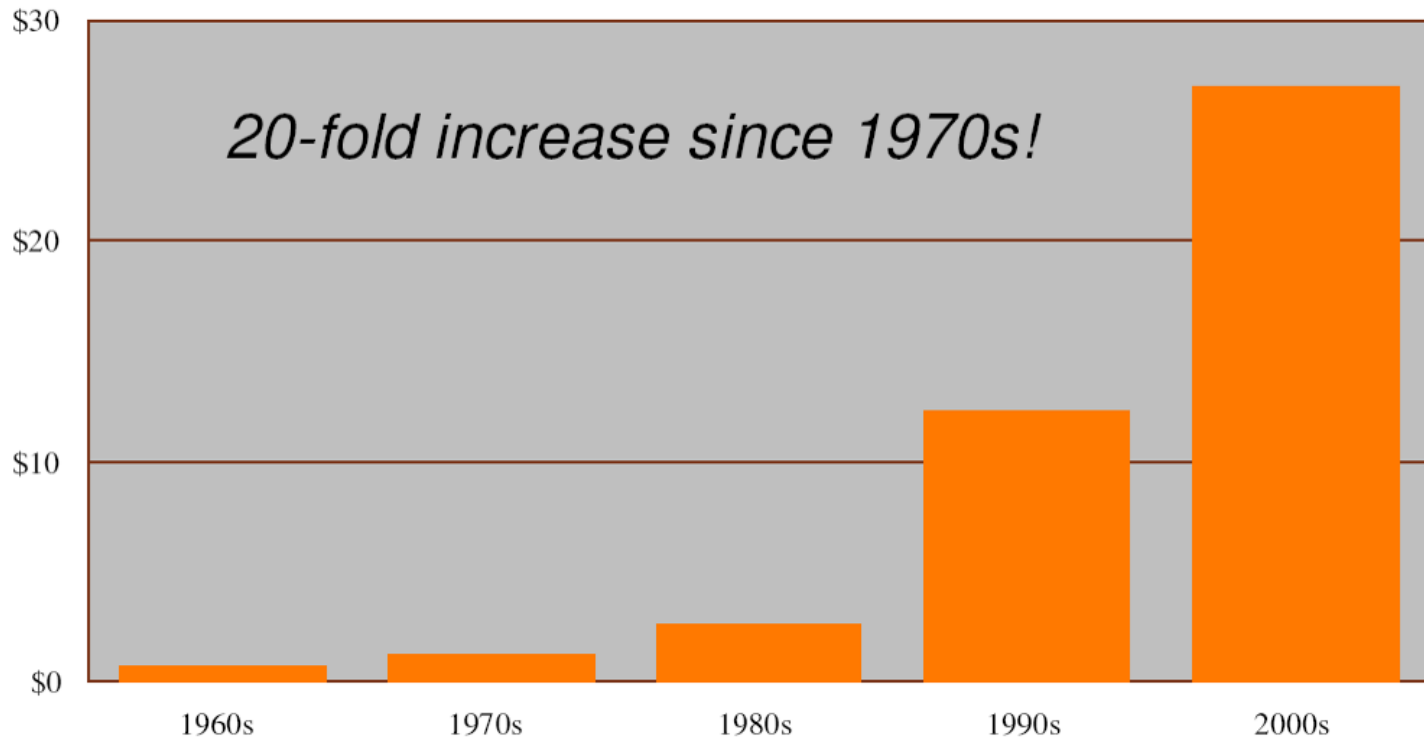
A shift in the distribution of temperatures has a much larger relative effect at the extremes than near the mean.

- Most of our infrastructure is designed for the extremes of the past.
- Need to look to future and re-evaluate risk.

Natural disasters are costly

Either geological or weather-related

Annual insurance disaster claims, billions, adjusted for inflation



Weather-related events are costly

Worldwide between 1950-2004 represent:

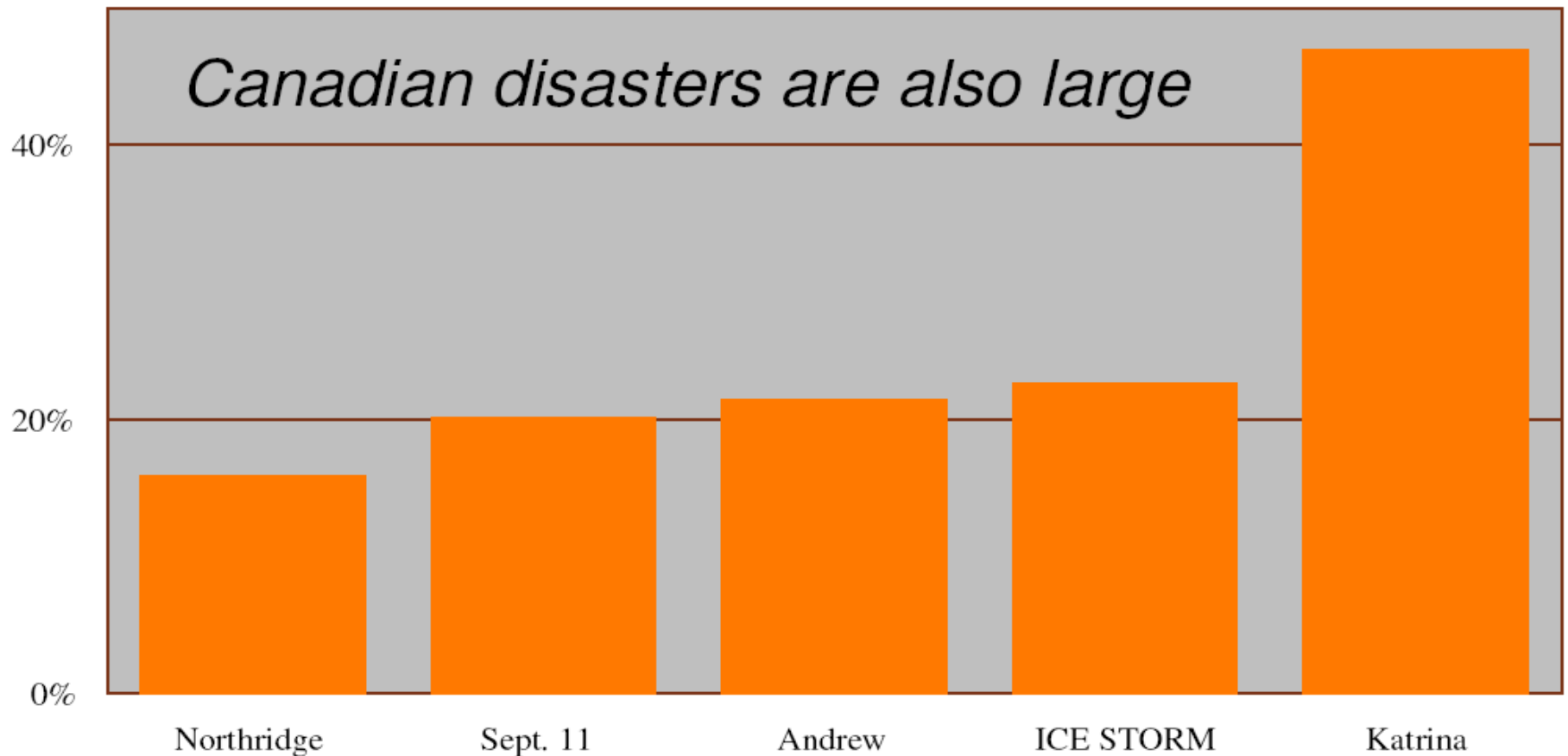
- 93% of all catastrophes
- 83% of total economic cost
- 87% of all insured losses

Insurers and re-insurers make payments possible

- By contract, re-insurance covers excess costs (to a maximum per policy) while individual insurers covers retained risk through their financial reserves.
- Otherwise, primary insurers could risk insolvency.
- Critical to have healthy insurance industry more insurers can share more risks.

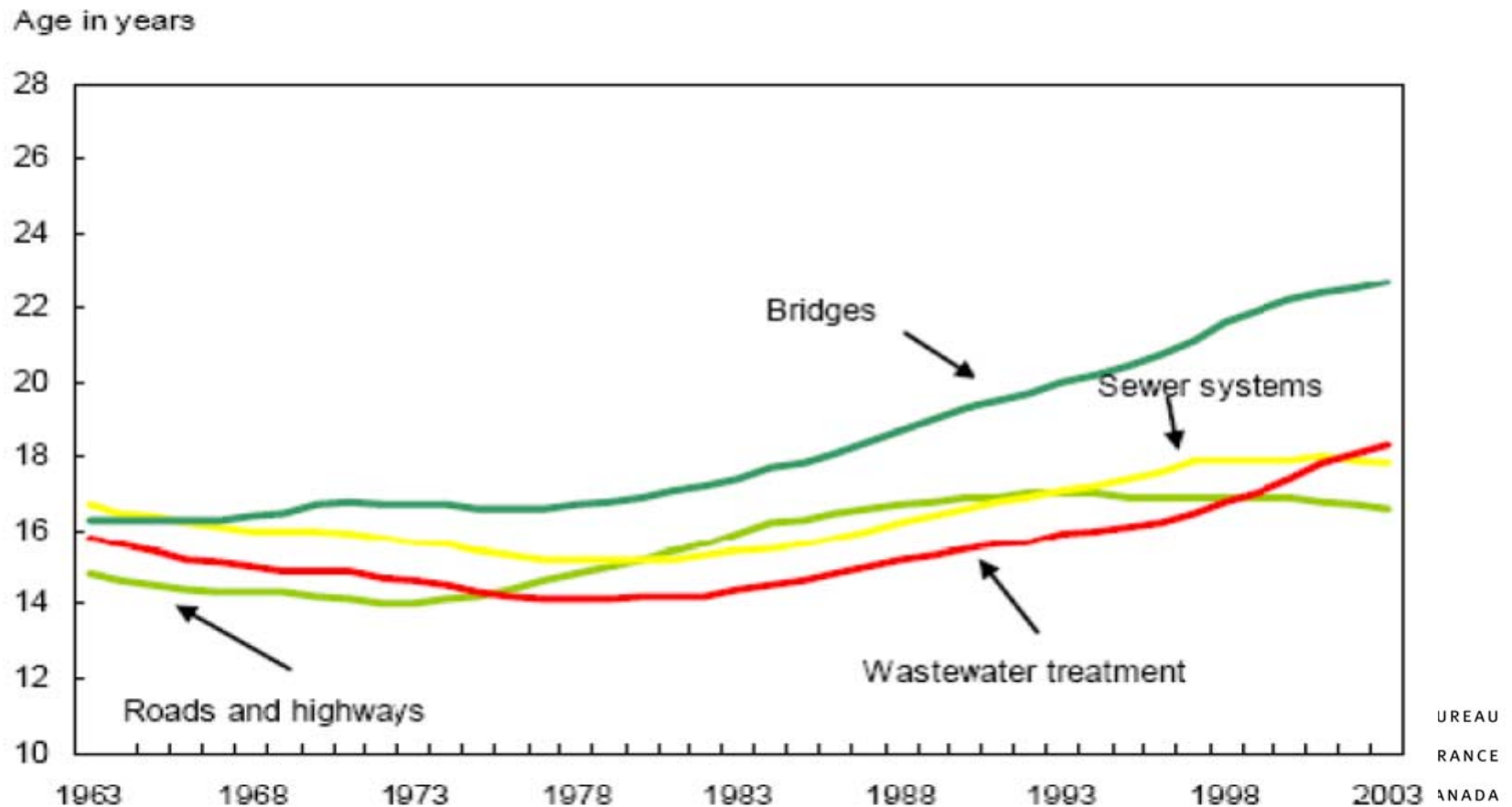
Largest insurance disasters

Total insurance claims paid as a share of national premiums



Aging infrastructure contributes to vulnerability

Average age of asset types



Source: Statistics Canada, special tabulation, Investment and Capital Stock Division.

Examples of Canadian weather related events

Saguenay floods (1996)	\$3.6 million
Ice Storm (1998)	\$1.6 billion
Peterborough floods(2004)	\$90 million
Toronto rains (2005)	\$500 million

Infrastructure failure to blame

- Infrastructure failure was the trigger for all
 - Saguenay Floods (dams)
 - Ice Storm (electric grid)
 - Peterborough (sewer/surface water systems)
 - Toronto (sewer/surface water systems)

Intense media coverage...

...but in Toronto

- The untold story about the August 19 rains:
 - Event represented more than 50% of all payouts for sewer back-up in Ontario over the previous decade!
 - \$500 million in sewer back-up claims
 - More basements are finished
 - Value of content much higher than before
 - Higher density of dwellings

In all cases...

- Insurance played its role
- Claims paid promptly
- Economic hardships avoided for citizens
- Customers happy
- Economy could continue to grow (i.e. in Quebec after the 1998 Ice Storm, the economy grew by 2.2%.)



However ...

- Vulnerable infrastructure not the only risk factor
 - Population density
 - Land use, (zoning by-laws)
 - Construction standards/norms for both infrastructure and buildings standards
 - Inadequate climatic design values

Natural events do not need to be disasters if we are ready...

- Act before the event to reduce impact
 - Reinforce/improve infrastructure
 - Better building codes, climatic design values
 - Land use revision
 - Improve disaster management

How to fund adaptation

- Needs to be an open dialogue
- Understanding the complexities and realities
- Cautious about do nothing approach
- Privatization/PPP

Insurance Industry's role

- Want to be part of the solution
- Expertise in:
 - Risk management
 - Recovery
 - Prevention
 - Finance

Questions/comments