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Stewart Gossage

The State of Infrastructure Today

- The need for investment in infrastructure is enormous
- Essential projects initiated in 50's 60's and 70's
- Have now reached the point in life cycle where investment is required
- In Canada, the value of public infrastructure in proportion to GDP in 2001 was 16%, compared to almost 35% in the early 70s



Magnitude of Problem

- Infrastructure debt in Canada \$125 billion
- Equals 6 to 10x annual investment rates
- Affects every sector and every level of government





Important Questions

Q – How can necessary investment be made within a reasonable time frame without undermining sound public finances?

Q – How to ensure proper maintenance over life of asset?





Calamitous History

A calamitous history of previous cost overruns of very large projects

- Brooklyn Bridge 100%
- Panama Canal 200%
- Sydney Opera House 1400%
- Suez Canal 1900%





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Lessons Learned

- Infrastructure maintenance is neglected
- There are risks inherent in every major project
 - 1. During proposal or approval process
 - 2. Due to the behaviour of parties
 - Interaction between project and its environment
 - Political changes
 - Changes in policy direction
 - Behaviour of partners & suppliers
 - Behaviour of employees & stakeholders
 - Risk to reputation
 - Market dynamics
 - Financial risks



Lessons Learned

- Procurement rules and nonadversarial context
- General project managers lack resources to successfully implement





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The Money

"There is evidence from other countries that public--private partnerships can both increase the efficiency of investments and support their financing. Now is the right time to encourage partnerships between government and private providers, given the climate of low, nominal interest rates and the presence of large pension funds that are searching for these kinds of investment opportunities."

-David Dodge Governor Bank of Canada 25 October 2006



Types of Project Delivery Methods

- Design-Build
- 2. Design-Construct
- 3. Design-Bid-Build
- 4. Design-Award-Build
- DBB with Construction Management
- 6. Design-Build-Operate-Maintain
- 7. Design-Build-Finance-Operate-Maintain
- 8. Build-Operate-Transfer





Why DBFOM?

- Transfers risk
- Build it now
- Record of public overruns





The Notwithstanding Clause

- Politics
- Influence
- Timing





JetTrain High Speed Rail - Florida







West Coast Express







SkyTrain Millennium Line







Anticipated Wins

- 1. Projects completed within the governments assigned budget
- 2. Projects completed on time
- 3. Superior quality of design and construction because costs over the life cycle are factored in

