

New Tools for New Times: Innovative Infrastructure Financing, Funding, and Delivery

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Introduction



About Canada West Foundation

A Public Policy Research Institute

- Independent
- Non-Partisan
- Non-Profit

Purpose of Canada West Foundation

- Objective policy research on issues important to the West
- Introduce western perspectives into national policy debates
- Initiatives for citizen engagement
- Act as a catalyst for informed public debate

CWF Studies on Municipal Finance

- Financing Western Cities: Issues and Trends (2000)
- Framing a Fiscal Fix-up: Strengthening Big City Finances (2002)
- Big City Revenue Sources: A Canada-US Comparison (2002)
- A Capital Question: Infrastructure in Western Canada's Big Six (2003)
- No Time to be Timid: Infrastructure in the Western Big Six (2004)
- Big Spenders: Expenditures of Western Canada's Big Six (2004)
- Straight Talk: Property Taxes in Western Canada's Big Six (2004)
- Foundations for Prosperity: Sustainable Infrastructure (2004)
- Rationale for Renewal: A New Big City-Provincial Partnership (2005)
- New Tools for New Times: Infrastructure Financing Tools (2006)
- Dollars and Sense II: Big City Finances in Western Canada (2008)
- Problematic Property Tax: Why the Property Tax Fails (2008)
- The Penny Tax: Tax Reform to Boost Civic Investments (2011)

Presentation Outline

- Size of infrastructure “deficit”
- Drivers of the challenge
- Costs of failing to act
- Five options for systemic fiscal reform
- Innovation
 - What?
 - Why?
 - Scope?
- Traditional decision-making model
- Innovative decision-making model
- Key Point: Diversity in tools and techniques is essential
- Innovation: PPP
- Innovation: Tax Tool Comparisons
- Innovation: The “Penny” Tax

Size of the Infrastructure Deficit: Total Government Sector



Quantifying Need: Total Public Sector

Estimates of the public infrastructure “deficit” vary. Economists are divided on how a “deficit” should be measured:

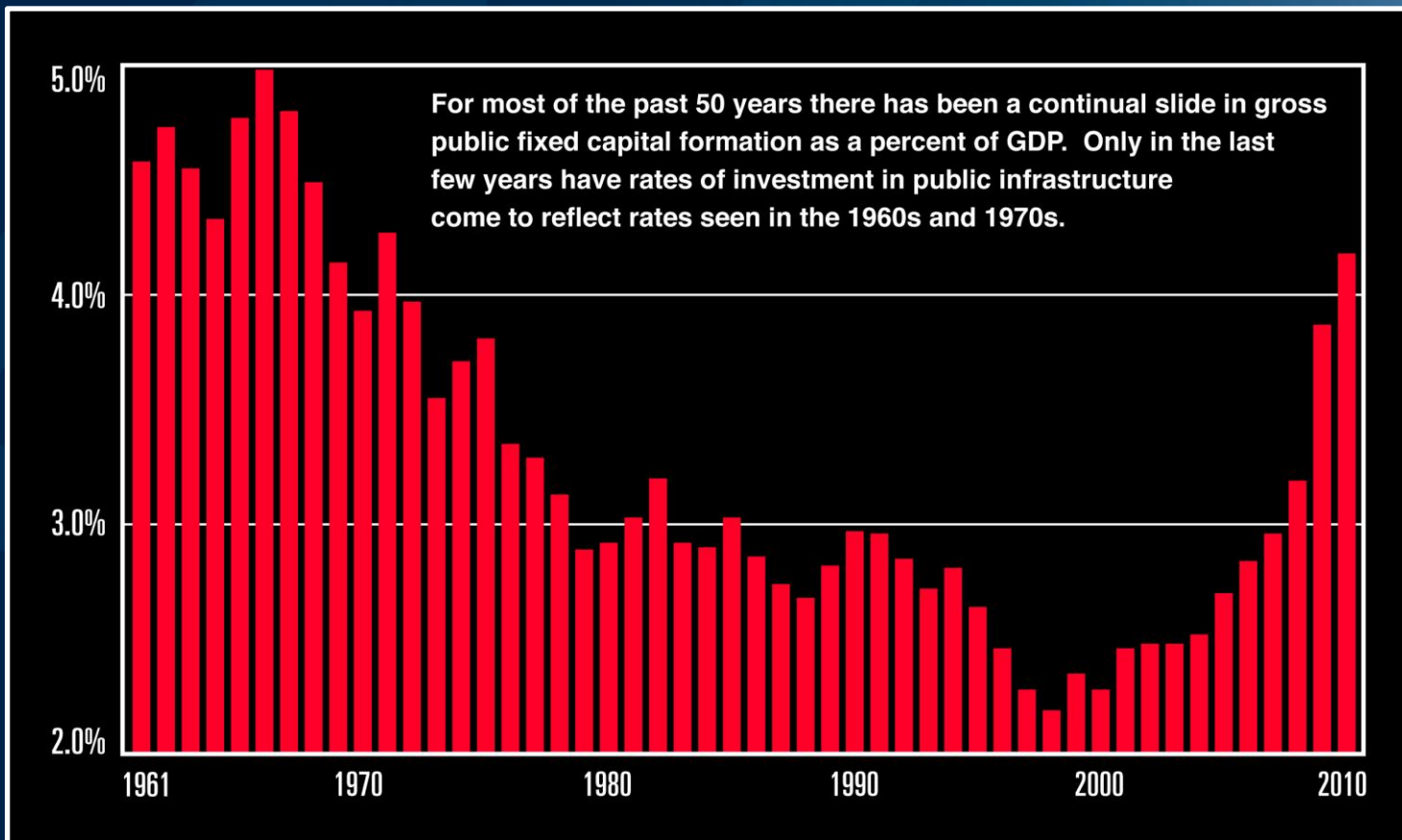
| | |
|--|----------------------|
| Average of Estimates (2002) <i>(Based on Asset Management Methodologies)</i> | \$50 Billion |
| Public Policy Forum (2002) <i>(Based on Survey Methodologies)</i> | \$83 Billion |
| McGill Department of Engineering (2003) <i>(Based on Benchmarking)</i> | \$125 Billion |
| Federation of Canadian Municipalities (1999) <i>(Based on Benchmarking)</i> | \$130 Billion |
| Optimal Public Capital Stock Ratio (2003) <i>(Based on the Conclusions of David Aschauer)</i> | \$570 Billion |

Quantifying Need: Total Public Sector

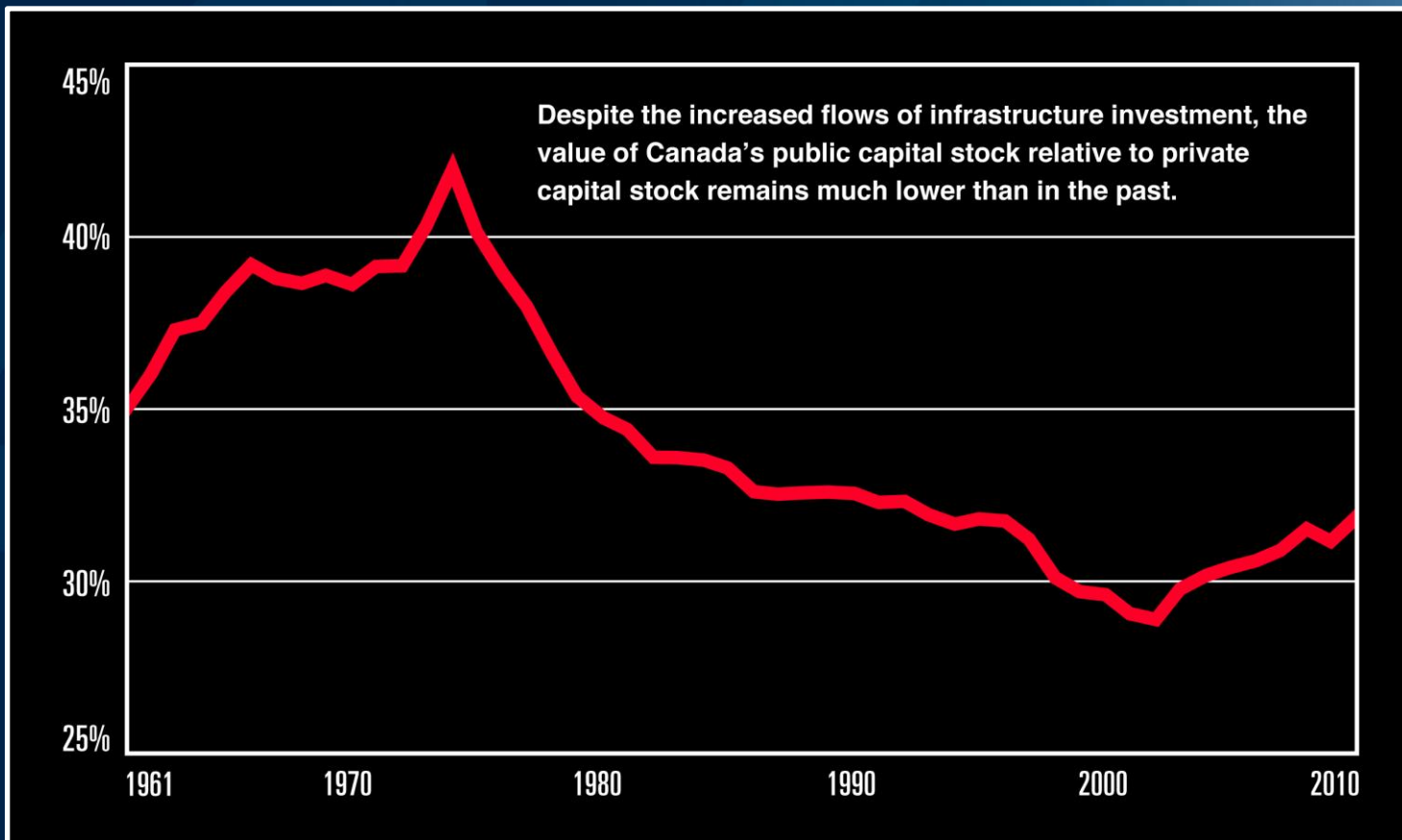
- In 2003, Canada West Foundation sought to put these estimates in context by analyzing past levels of government capital flows.
- The flow of government investment in fixed capital relative to GDP and the value of the public fixed capital stock relative to the private capital stock have both fallen steadily since 1960.
- Much of Canada's infrastructure was built between 1950 and 1970. Thus, we should expect to see investment tail off. However, much of that infrastructure is reaching the end of its lifespan. The time for renewal and rehabilitation has arrived.
- The ratios are recovering, but the drop is of such a magnitude that recent estimates of the infrastructure "deficit" may not be out of the ballpark.

Quantifying Need: Total Public Sector

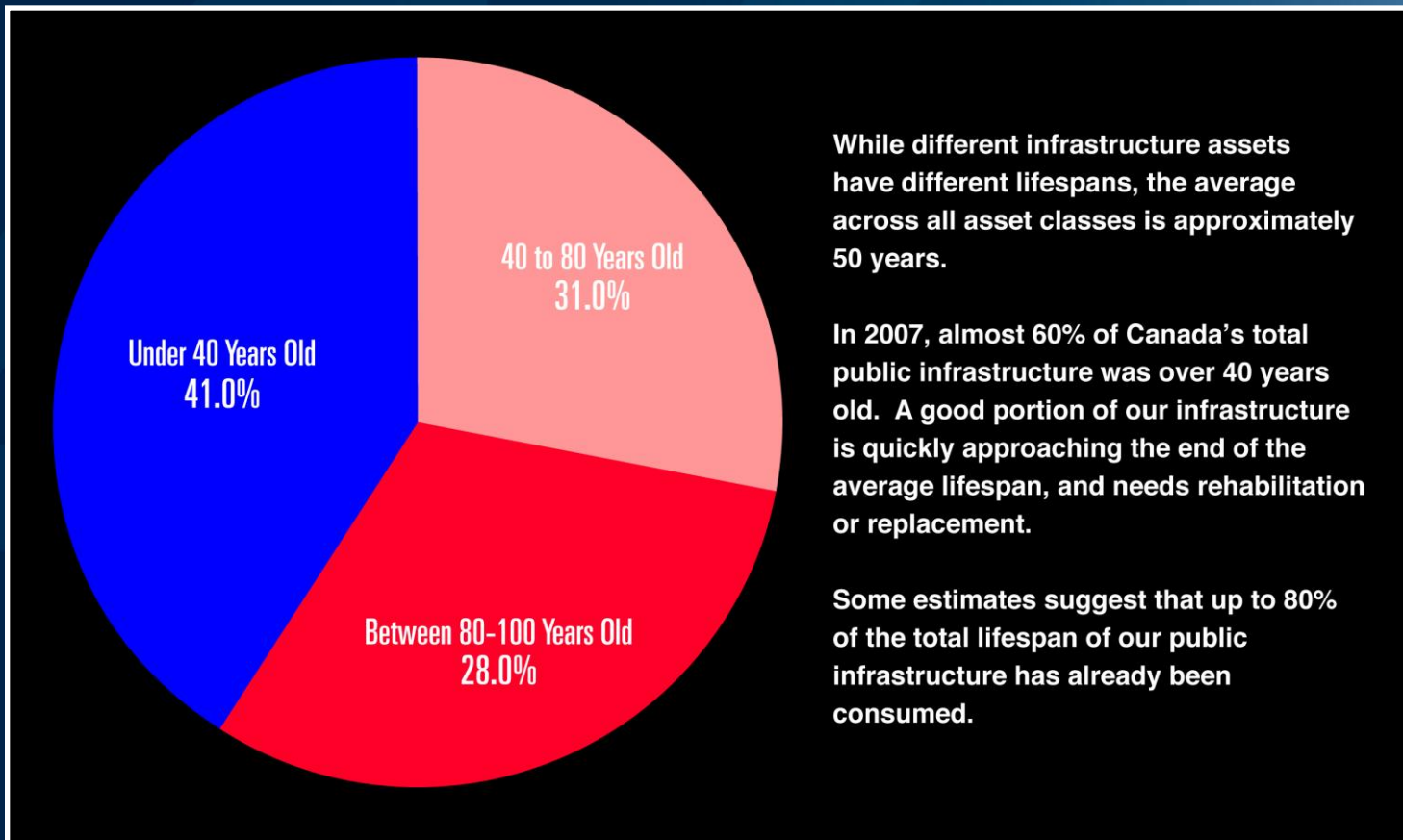
Flows of Fixed Capital Formation as a % of GDP (1961-2010)



Quantifying Need: Total Public Sector Ratio of Public to Private Fixed Capital Stock (1961-2010)



Quantifying Need: Total Public Sector Age Profile of Public Infrastructure in Canada (2007)



Size of the Infrastructure Deficit: Local Government Sector



Quantifying Need: Local Government Sector

Most estimates of Canada’s infrastructure “deficit” actually focus on the local government sector since this sector is responsible for the great majority of public infrastructure. Since 1984, the Federation of Canadian Municipalities (FCM) has been tracking unfunded municipal infrastructure needs:

| | |
|------------|---------------|
| 1984 | \$12 Billion |
| 1988 | \$18 Billion |
| 1992 | \$20 Billion |
| 1996 | \$44 Billion |
| 2002 | \$57 Billion |
| 2007 | \$123 Billion |

Quantifying Need: Western Big 7 Cities

Individual cities across western Canada have also begun building inventories of their infrastructure and assessing renewal and rehabilitation needs, including required new infrastructure. The following are the average annual infrastructure funding “gaps” being reported by the cities.

| | |
|--------------------|------------------------|
| Victoria | \$0.047 Billion |
| Vancouver | \$0.098 Billion |
| Edmonton | \$1.920 Billion |
| Calgary | \$1.195 Billion |
| Saskatoon | \$0.093 Billion |
| Regina | \$0.129 Billion |
| Winnipeg | \$0.737 Billion |
| Total | \$4.220 Billion |

Quantifying Need: Growth in Edmonton's Funding Gap

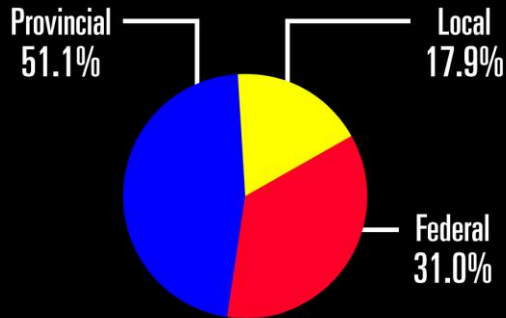
The City of Edmonton has been very proactive in measuring its infrastructure needs and assessing the funding for new assets and the renewal and rehabilitation of existing assets. Edmonton has estimated its unfunded infrastructure needs across various 10 year periods:

| | |
|--------------------|------------------|
| 1999 to 2008 | \$1.750 Billion |
| 2001 to 2010 | \$2.500 Billion |
| 2003 to 2012 | \$3.190 Billion |
| 2005 to 2014 | \$4.410 Billion |
| 2007 to 2016 | \$5.248 Billion |
| 2009 to 2018 | \$19.207 Billion |

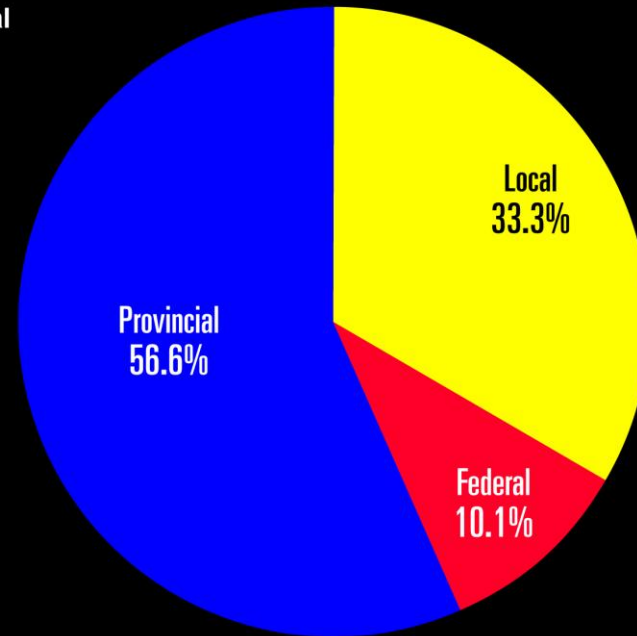
Profile of Public Infrastructure

Share of Infrastructure by Order of Government (1961 and 2010)

The proportion of infrastructure managed by local governments has doubled in the last 50 years. Infrastructure is clearly a local issue, as that sector owns the majority of hard economic assets.



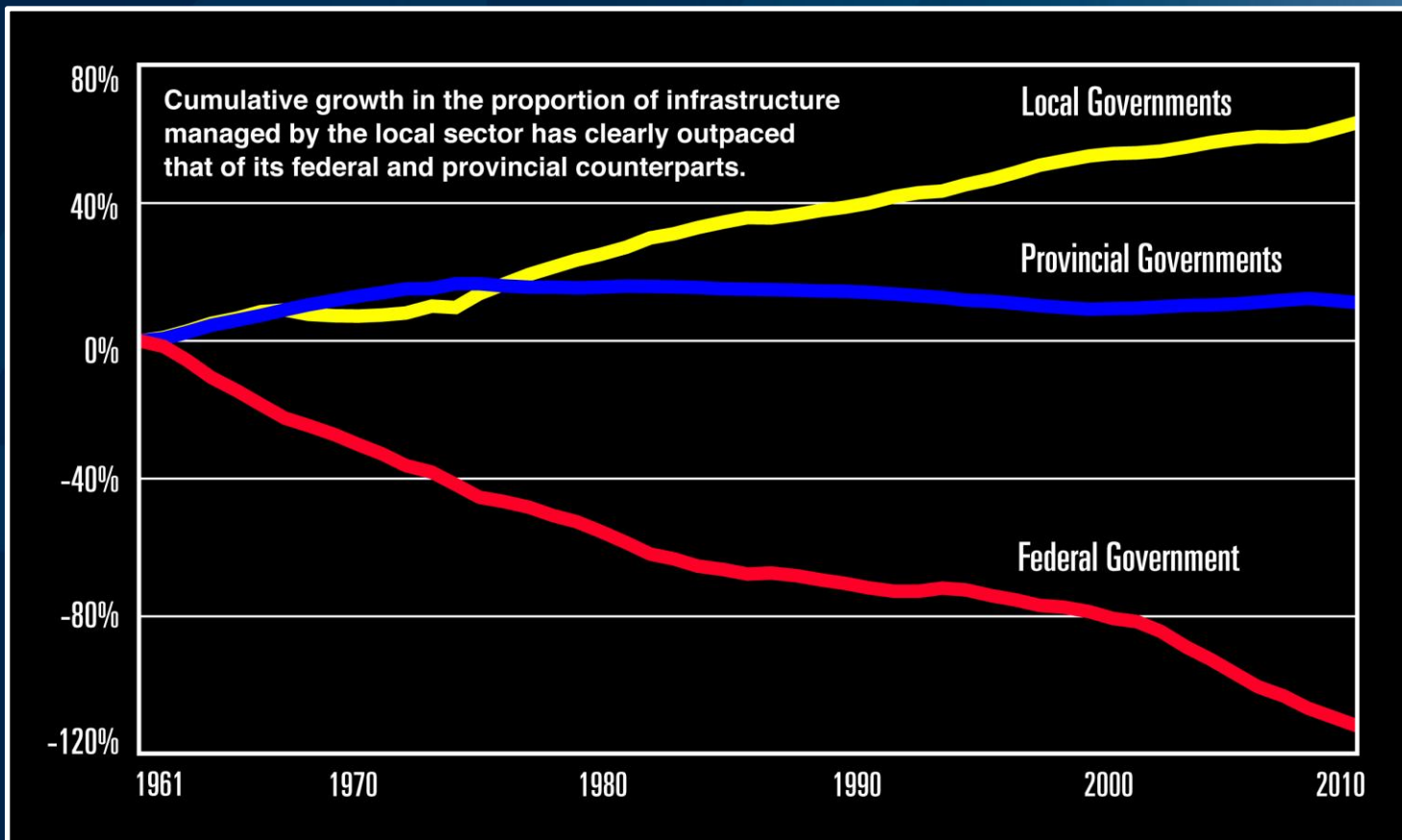
1961 Public Stock of Fixed Capital
\$28.9 BILLION



2010 Public Stock of Fixed Capital
\$951.5 BILLION

Profile of Public Infrastructure

Cumulative Growth in Each Sector's Infrastructure Share (1961-2010)



Drivers: How We Got Here



Drivers

Understanding why “infrastructure deficits” have appeared is a first step in the quest for possible solutions:

Growing Demand:
growth

systems

pricing mechanisms

Insufficient Funding:

priorities

toward debt financing

- Rapid and changing patterns of urban
 - Aging infrastructure
 - Rising standards
 - Lack of correct
- Past fiscal restraint and recession
 - Competing budget
 - Negative attitudes

Costs: Failing to Act



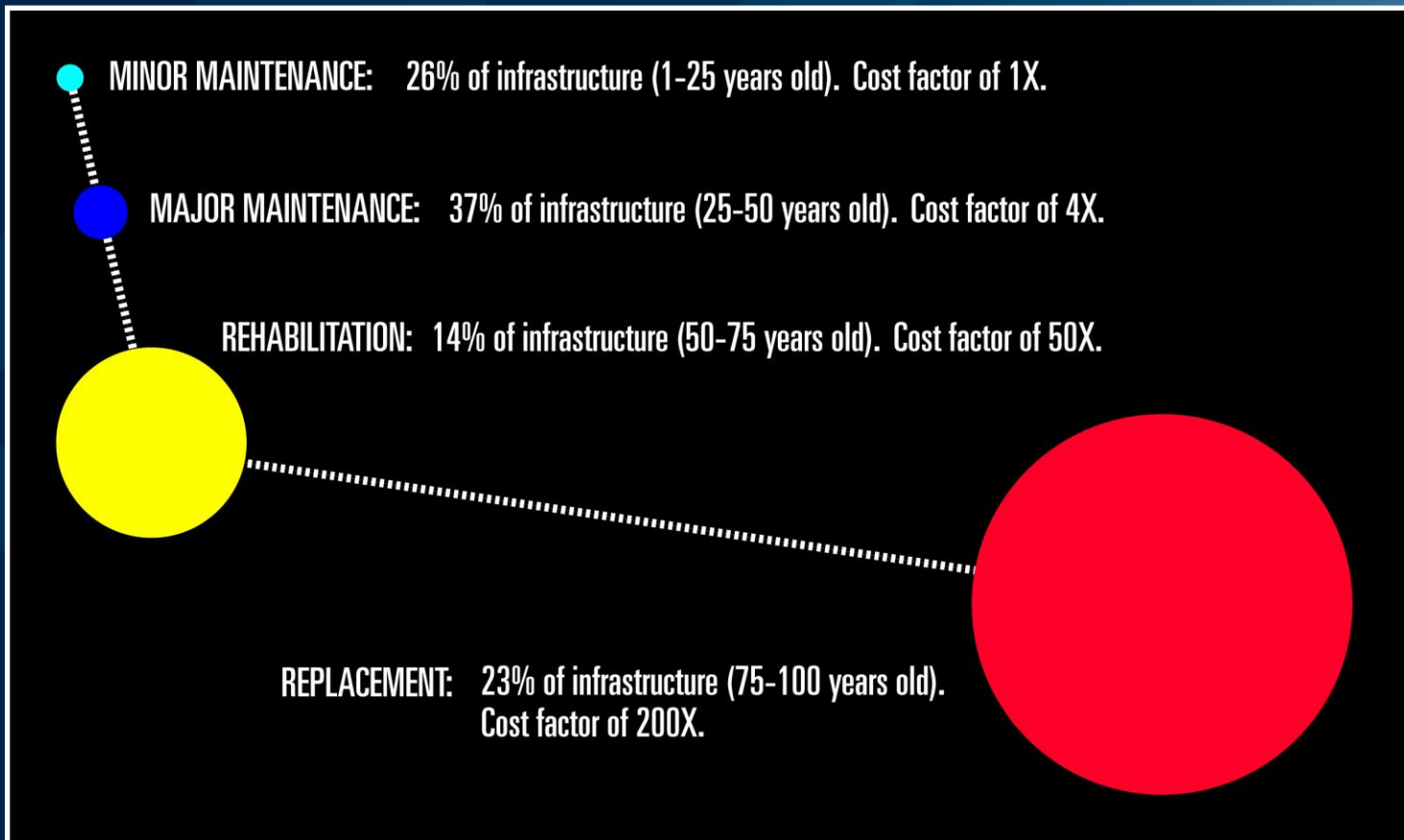
Costs of Failing to Act

The time for renewing Canada's infrastructure has arrived, and the great majority of this infrastructure is the responsibility of local governments. The needs are huge, and failing to meet the challenge will entail significant costs:

- Higher operating costs for business and governments.
- Higher environmental costs such as increased pollution.
- Lost economic potential and foregone economic growth.
- Threats to public health and safety if even the most basic of infrastructure systems become compromised (e.g., water and wastewater) become
- Higher costs in the future as rehabilitation gives way to replacement.

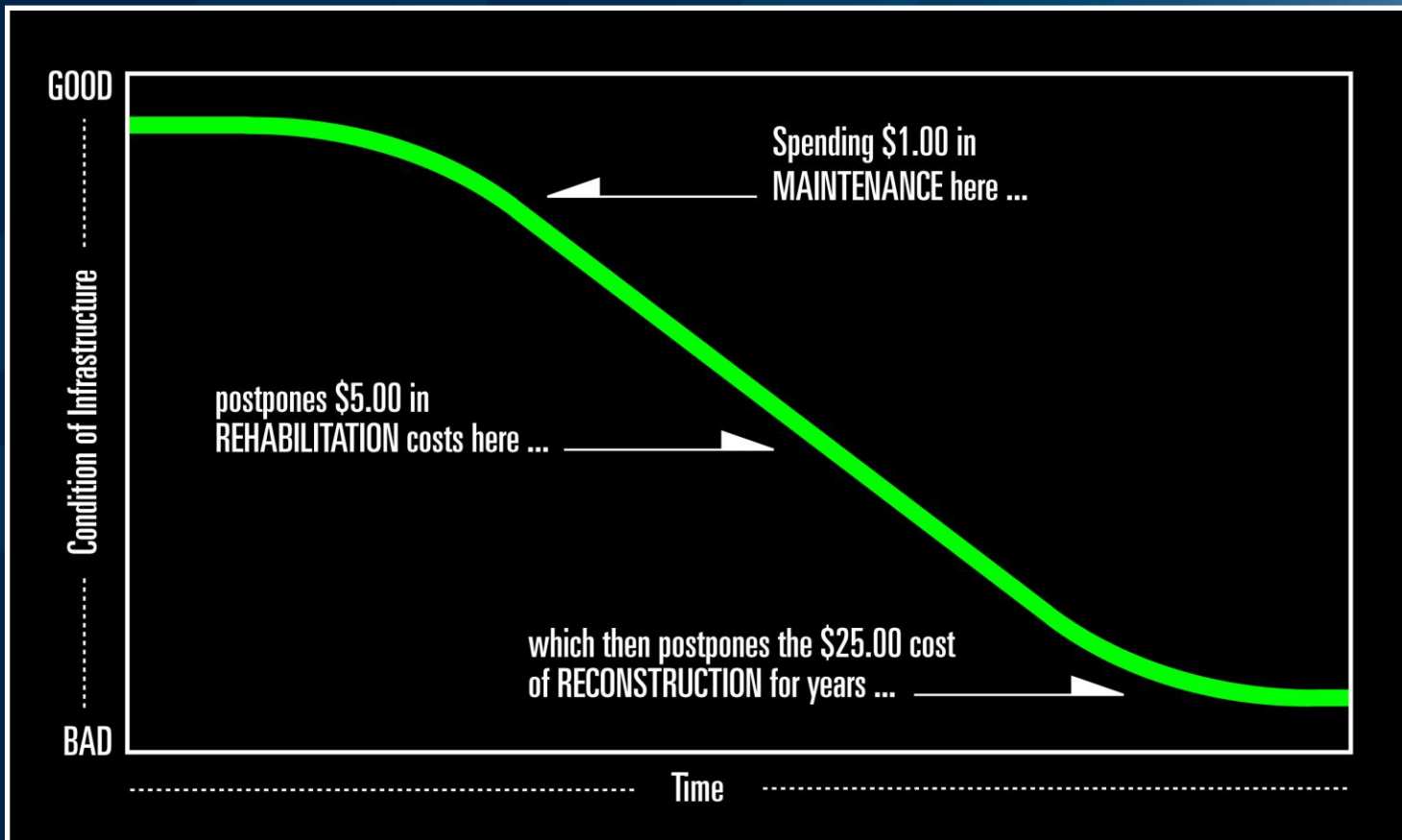
Costs of Failing to Act

Water and Wastewater Infrastructure Profile in Hamilton, ON



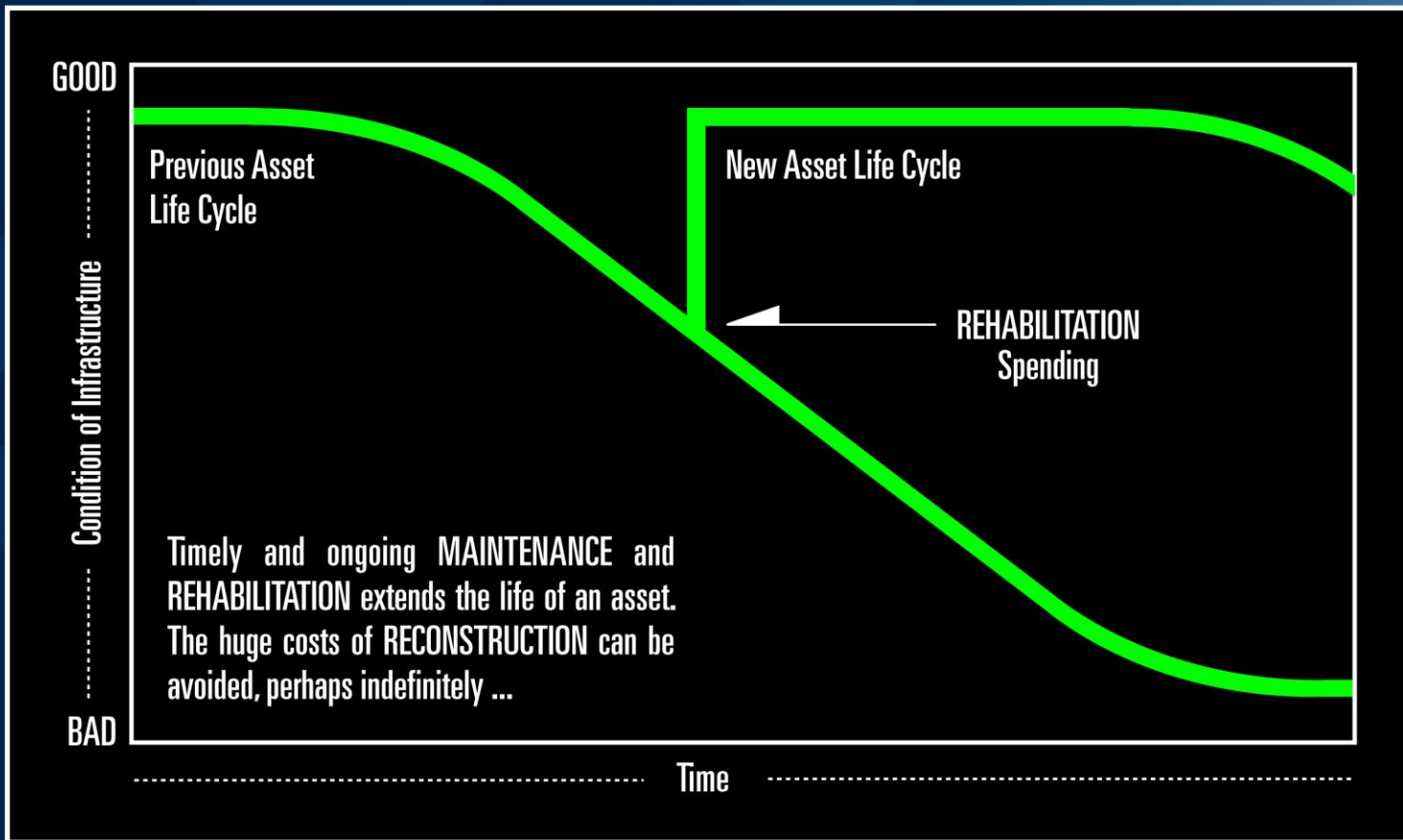
Costs of Failing to Act

De Sitter's "Law of Fives"



Costs of Failing to Act

Rehabilitation Spending to Extend Asset Life



Systemic Fiscal Reform: Five Elements



Systemic Reform: Five Elements

Under its “*Western Cities Project*” the Canada West Foundation focused on five themes to meet urban financial challenges:

- Focus on core responsibilities and priorities. Return to the primary purpose of local government or square responsibilities with the right resources.
- Better pricing of services and infrastructure, and expand user fees. User fees are not just a means of raising revenue, but act as price signals that limit the demand for services and infrastructure.
- Adopt competitive models for infrastructure provision and service delivery through a wide variety of P-3 arrangements.
- Vigorously pursue innovative sources of capital financing.
- Secure better and more diverse municipal tax tools.

What is Innovation?



What is Innovative Infrastructure Finance?

- Innovation is all about expanding the toolkit for infrastructure financing, funding, and delivery—including better tax diversity at the local level—to achieve maximum effectiveness and efficiency in infrastructure provision.
- In the past, the argument for expanded funding sources has typically revolved around fiscal concerns. In other words, more money to fund more services and infrastructure.
- However, there are also complex economic reasons for an expanded set of municipal financing, funding, and delivery approaches. This rationale rests on the need to maximize efficiency in infrastructure provision, recognizing that the financing and funding sources employed affect both the supply of infrastructure and the demand for infrastructure.

What is Innovative Infrastructure Finance?

- Innovation recognizes that closing an infrastructure “deficit” cannot simply focus on the supply side of the equation—more funding for more infrastructure. The question of demand also has to be addressed.
- Innovation recognizes that a sustainable answer centres around providing infrastructure in the most effective, efficient, and economic way possible—using financing, funding, and delivery tools that allow governments to increase supply but also limit excessive demand.
- Pursuing innovation requires:
 - Optimal decisions on **FINANCING**
 - Effective, efficient, and equitable sources of **FUNDING**
 - Appropriate modes of **DELIVERY**
 - And the right **TECHNIQUES** to implement the above

Why Innovation?



Why Innovation is Necessary

Huge Investments are Needed: While the magnitude of the infrastructure funding gap is disputed, there is agreement that it is sizeable, and it outstrips current government fiscal capacity. Traditional methods are unable to contend with its sheer size.

Tax-supported Infrastructure is the Largest Need: Across our municipalities, the bulk of the funding “gap” is in tax-supported rather than self-sustaining infrastructure. This must inform our thinking.

Addressing the Drivers: Solutions need to address the root causes and the drivers. Anything less will not ensure sustainability across the long-term.

International Lessons: Innovation is being learned and implemented all over the world, and Canada needs to begin picking up on the broader international experience.

Why Innovation is Necessary

Yesterday: The size of the infrastructure challenge alone used to serve as the clarion call for innovation. Innovation was seen as necessary to secure the financing and funding needed.

Today: Innovation today is now even more important. The federal and every provincial government has slipped back into fiscal deficit. Each and every tax dollar is precious. Recent investments may slow as governments seek to bring balance back to the books. This places a premium on creative options.

“If not now, then when?”

The Scope of Innovation



The Scope of Innovation

Viewed broadly, there is no such thing as entirely “new” approaches to infrastructure provision. The scope for innovation is bounded by what the Canada West Foundation calls:

The “Triple-Two-Rule”

The “Triple-Two-Rule” asserts:

- There are only two ways to **FINANCE** Infrastructure
- There are only two ways to **FUND** the Financing
- There are only two ways to **DELIVER** Infrastructure

The Scope of Innovation

Financing refers to how the upfront capital will be secured:

Pay-as-you-Go **OR** **Debt Financing**

Funding refers to how the financing is to be repaid in the case of borrowing, or where pay-as-you-go funds will come from:

Taxation **OR** **User Pay**

Delivery refers to who will be responsible for providing the infrastructure:

Public Sector **OR** **Private Sector**

The Scope of Innovation

The basic approaches to financing, funding, and delivery are limited. But the techniques to accomplish the larger approaches are numerous:

BORROWING

- Regular amortized debentures
- Local community bonds
- Tax-exempt general obligation bonds
- Tax-exempt revenue bonds
- Revolving loan funds
- Infrastructure banks
- Senior government credit enhancement
 - Interest rate subsidies
 - Subordinate debt positions
 - Revenue bond guarantees
 - Direct Loans and Lines of credit

TAXATION

- Personal income tax
- Corporate income tax
- General property tax
- Value capture taxes
- Land value taxes
- Real estate transfer tax
- Tax increment financing
- Earmarked taxation
- Vehicle-specific taxes
- Infrastructure penny tax
- Grants for innovation

The Scope of Innovation

The “**TRIPLE-TWO-RULE**” means innovation occurs within a boundary that governments cannot change. There are three types of innovation:

Use a Familiar Technique Differently: There is nothing new in spending tax dollars, but earmarking taxes for infrastructure is somewhat innovative.

Employ Entirely New Techniques: There is nothing new about borrowing, but using tax-exempt or community bonds rather than a regular amortized debenture bond is innovative.

Apply Traditional Approaches and Techniques to Different Assets: There is nothing new about user pay for water and wastewater systems, but user pay roadways—toll roads—are innovative.

The Scope of Innovation

It is important to keep three qualifiers in mind with respect to innovation.

Innovation is Contingent and Relative: A technique may be foreign to Canada, but may have served as standard practice elsewhere for some time. Yesterday's innovation often becomes today's routine practice.

Innovation Occurs on a Spectrum: Some innovations are nothing more than a traditional technique with a new name and a fresh coat of paint. Others are more substantial.

The Most Robust Innovations Target Tax-funded Infrastructure: The most innovative techniques focus on infrastructure traditionally funded through taxation. Innovation here seeks to “push” this infrastructure into the “user pay” category.

The Traditional Model



The Traditional Model

There are numerous reasons for the infrastructure challenge, including less than optimal choices on approach and the limited range of techniques:

FINANCING remains heavily tilted toward “pay-as-you-go.” Borrowing tends to have less support.

FUNDING is generally accomplished through general taxation. Even user pay taxes such as fuel taxes are rarely earmarked for related infrastructure.

DELIVERY is generally concentrated within the public sector despite the advantages of private participation.

*None of this is necessarily optimal.
But it is EASY and CONVENIENT.*

The Traditional Model

The way infrastructure is financed, funded, and delivered creates a basket of incentives that hit on the demand for infrastructure.

Pay-as-you-Go Financing: Fails to provide sufficient up-front capital for expensive assets with a long lifespan, and creates problems with intergenerational equity. Borrowing means interest, but it also offsets inflation future and allows future users to help pay.

General Tax Funding: No direct financial consequence for individuals using infrastructure. It amounts to subsidization and results in artificially increased demand.

Public Delivery: Exclusive provision through public monopolies ignores the benefits that can accrue from public-private-partnerships (PPPs).

Innovative Decision-Making



Innovative Decision-Making

In *New Tools for New Times*, Canada West Foundation collapsed its research on innovative infrastructure finance into a model to facilitate better choices.

- Innovative decision-making starts by first deciding on the broad **APPROACH** to financing, funding, and delivery.
- A second round of decision-making chooses the best **TECHNIQUE** to implement the broader approach.
- The model asserts that each and every infrastructure asset possesses a number of **CHARACTERISTICS**.
- These characteristics must be the **PRIMARY DRIVER** in deciding what approaches and techniques should be employed.

Innovative Decision-Making

| | | |
|---------------------------|-----|-------------------|
| Large Asset | vs. | Small Asset |
| High Cost | vs. | Low Cost |
| Short Construction Period | vs. | Long Period |
| Long Life Span | vs. | Short Life Span |
| Complex Asset | vs. | Simple Asset |
| Low Future Commitment | vs. | High |
| Long Payback | vs. | Short Period |
| High Priority | vs. | Low Priority |
| Visible Asset | vs. | Non-visible Asset |
| New Asset | vs. | Existing Asset |
| Integrated System | vs. | Stand-alone |
| Economic Asset | vs. | Social Asset |
| Community-wide | vs. | Localized |
| Broad Usage | vs. | Particular Usage |
| Regulated Asset | vs. | Unregulated |
| High Environment Impact | vs. | Low Impact |
| Marketable Asset | vs. | Non-marketable |



FINANCING:
Pay-as-you-Go
OR
Borrowing



FUNDING:
Taxation
OR
User Pay



DELIVERY:
Public
OR
Private

Innovative Decision-Making: Financing

PAY-AS-YOU-GO

100% Cash



50-50 SPLIT



100% Debt

BORROWING

TRADITIONAL

Current Tax Revenue
Reserve Funds
Budget Surpluses

INNOVATIVE

Earmarked Taxation
Lease-Purchase
Cross-Border Tax Lease

TRADITIONAL

Amortized Debenture
Loan Guarantees
Interest Rate Subsidies

INNOVATIVE

Tax-exempt GO Bonds
Infrastructure Banks
Community Bonds

Innovative Decision-Making: Funding

TAXATION

100% Taxes



User Pay Taxes
Fees and Taxes
Indirect Fees



100% Fees
USER PAY

TRADITIONAL

General Property Taxes
Capital Grants

INNOVATIVE

Tax Increment Financing
Infrastructure Penny Tax

TRADITIONAL

Developer Charges
Uniform User Fees
Flat Rate User Fees

INNOVATIVE

Storm Drainage Fees
Variable User Fees
Volumetric Pricing

Innovative Decision-Making: Delivery

PUBLIC SECTOR

100% Public



PPP



100% Private

PRIVATE SECTOR

TRADITIONAL

Government Department
Arm's Length Agency

INNOVATIVE

Corporitization (PIC)
New Utility Models

TRADITIONAL

Bid-Build (BB)
Build-Transfer (BT)

INNOVATIVE

Design-Build (DB)
A Complex DBFOOT

TRADITIONAL

Regulated Private Utility
Privatization

INNOVATIVE

Sale-Leaseback

Key Finding: Diversity of Tools is Key



Diversity of Tools is Key

There are many different types of public infrastructure, and each asset possesses its own unique set of characteristics. All of this implies that governments employ a diverse set of techniques.

- A wider basket of financing, funding, and delivery tools is **NOT** just about more funding for more infrastructure.
- Rather, governments **MUST** have a diverse basket of techniques if they are to maximize effectiveness, efficiency, and equity in the provision of infrastructure and ensure sustainable investments.
- Financing, funding, and delivery options that focus on infrastructure currently supported through taxation **MUST** be at the centre of the discussion. The great bulk of the infrastructure challenge is in the tax-supported category rather than in user pay systems.

Diversity of Tools is Key

- From a financing perspective, the best way to bring supply and demand for infrastructure into closer proximity is to draw the tightest link possible between those who use the infrastructure and those who pay.
- As such user fees should be applied to each and every infrastructure asset and municipal service possible. There are exceptions, such as when this would create intolerable equity effects.
- The second choice is an indirect user fee or user tax that relates to the infrastructure in question. For roads, such taxes include fuel taxes, wheel taxes, vehicle sales taxes, parking taxes, car rental taxes, registration fees, and driver's license fees and toll roads.
- The third choice is general taxation. It should be reserved as the choice of last resort as no direct financial consequence accrues to the individual user.

Diversity of Tools is Key

- Diversity of technique allows for the optimal financing, funding, and delivery of infrastructure based on the characteristics possessed by that infrastructure.
- For example each and every tax has its own set of advantages and disadvantages. No tax is ever completely neutral with respect to investment decisions. To make sure that these advantages and disadvantages offset one another, tax diversity is required.
- But unlike many other jurisdictions, Canadian municipalities are heavily and singularly reliant on the property tax, with minimal other sources of revenue. This works against the goal of diversity in funding techniques.

Innovation: Private-Public-Partnerships



PPP: Working Definition

PPP sees the public and private sectors working in cooperation to provide both infrastructure and services. PPP refers to a wide range of arrangements that fall between conventional procurement through public ownership and delivery on the one hand, to full private delivery on the other hand. PPPs are the middle ground between pure public delivery and complete private delivery. Thus, PPP is not privatization.

A number of different labels and acronyms are often attached to the concept, sometimes to “short-circuit” opposition:

- PPP (Public-Private-Partnership)
- P-3 (Triple-P)
- PFI (Private Finance Initiative)
- PFP (Privately Financed Projects)
- PPII (Private Participation in Infrastructure Initiatives)
- AFP (Alternative Financing and Procurement)

PPP: A Spectrum of Models

PPPs come in a very wide range of models, but all share at three basic features:

- The RISKS involved with delivery infrastructure and services to the public are shared between the public and private parties.
- REWARDS are also shared. The Public partner receives reward in the form of better value of dollars spent. The private partner receives reward in the form of a return on investment.
- The SIZE of the reward relates to the of risk assumed by each partner.

At the heart of PPP is a shift in thinking about the public sector. Instead of being the exclusive financier, owner, operator, manager, and provider, the public role is to facilitate, regulate, and guarantee provision. What is important is that infrastructure and services are provided, not who does the actual providing.

PPP: Models

Unknown to many is that PPPs apply to delivery of both public services AND infrastructure.

- For service—the operating side of the budget—PPPs sees private and non-profit involvement through competitive tendering to deliver services:
 - Operations and Maintenance (O&M)
 - Service Contracts
 - Alternative Service Delivery
 - Managed Competition
- For infrastructure—the capital side of the budget—PPPs go beyond the traditional “Bid-Build” contract to involve private participation in:
 - Design (D)
 - Owning (O)
 - Financing (F)
 - Operating (O)
 - Building (B)
 - Asset Transfer (T)

PPP: Advantages

The primary motivator of PPP for infrastructure is not cost savings, but better value for dollars spent through proper life-cycle asset management, optimal risk sharing, faster completion, improved quality and technology, and more diverse techniques for financing, funding, and delivery.

- Risk Transfer
- Flexibility
- Specialization
- Performance Guarantees (e.g., on-time and on-budget)
- Creating new revenue streams
- Freeing up public funds for use elsewhere
- Securing tax savings (e.g., indirect subsidization)
- Enhanced asset management
- Competition
- Innovation
- Better pricing models

PPP: Disadvantages

The disadvantages of PPP should not be ignored, but neither should they be seen as automatic “deal-breakers.” Many of them can be side-stepped if PPPs are pursued in a programmatic and methodological fashion. The process of PPP has to be well-thought out from the decision to build to eventual transfer of the asset. The PPP process continues to be refined and improved as the public and private sector gain more experience.

- High transaction costs
- Difficulty securing optimal risk allocation
- Potential for skewing project priorities
- Potential loss of accountability and transparency
- Potential loss of control
- Unresponsive to changing needs or priorities
- If no savings result, no new fiscal space is secured

PPP: Winning Conditions

Success with PPPs is not guaranteed, and it takes work. It requires effort to build expertise and institutional capacity. Pursuing PPP in an ad hoc and tentative way increases the change for “crash and burn” scenarios. Without a long-term programmatic commitment, the private sector will not invest the resources to participate in PPPs.

- Focus on the big picture
 - No indiscriminate guarantees
- Commit to accountability
 - Strong public sector comparator (PSC)
- Properly allocate risk
 - Secure expertise and experience
- Select the right projects
 - Establish a successful track record
- Have realistic expectations
 - Align legislation to facilitate PPPs
- Communicate effectively

Innovation: PPP Reality Check



PPP: Reality Check

The PPP concept was conceived largely in the UK and has since been exported around the world. The UK continues to be the most significant user. A quick review of the UK experience helps keep the debate over PPP in context.

- In 2003, the total value of all investments in public infrastructure in the UK was 1.75% of GDP. Without PPP it would be 1.50%. PPPs in the UK account for only 15% public infrastructure investment.
- The value of PPP is impacted by three large projects—the London Underground, the Channel Tunnel, and its new Rail Link.
- In 2003, 70% of all signed PPP deals in the EU were in the UK. Of that amount, one-quarter of the value was in the Channel Tunnel Project.
- Regardless of all the “hype” around PPP, it tends to touch only a small share of infrastructure. That may, however, change.

PPP: Reality Check

- The National Accounting Office (NAO) estimates that PPP has yielded, on average, a cost savings of 17% compared to traditional public delivery. With 15% of infrastructure under PPP, what would cost savings look like for Calgary?

Calgary 2007 Capital Expenditure **\$1.025 Billion**
Potential PPP Savings **\$26 Million**

- Very aggressive PPP programs for service delivery like those in Indianapolis or Phoenix have resulted in up to 10% savings across the operating budget. What would be the savings here?

Calgary 2007 Operating Expenditure **\$1.650 Billion**
Potential PPP Savings **\$165 Million**

Innovation: Taxes in Canadian and American Cities



Local Tax Tools in Western Canada

Taxation

- General property tax
- Business property tax
- Franchise fees & utility taxes
- Amusement tax

Tax-Sharing

- Provincial fuel tax
- Federal fuel tax

Other

- Federal and provincial grants
- User fees
- Investment and enterprise income
- Licenses, permits, fines

Local Tax Tools in Denver, CO

Taxation

- General property tax
- Franchise fees & utility taxes
- General retail sales tax
- Sales tax on lodging
- Sales tax on restaurants & pubs
- Sales tax on liquor off-sales
- Sales tax on car rentals
- Sales tax on aviation fuel
- Sales tax on entertainment
- Employee head tax
- Auto ownership tax

Other Taxes

- Real estate transfer tax
- Any tax except income taxes

Tax-Sharing

- State fuel tax
- State tobacco tax
- State vehicle registration tax
- State lottery tax

Other Revenue

- Federal and state grants
- User fees
- Investment and enterprise income
- Licenses, permits, fines

Local Tax Tools in Seattle, WA

Taxation

- General property tax
- Franchise fees & utility taxes
- General retail sales tax
- Sales tax on entertainment
- Sales tax on gambling
- Sales tax on restaurants & pubs
- Sales tax on car rentals
- Gross receipts business tax
- Motor vehicle sales tax
- Real estate excise tax

Other Taxes

- Employee head tax
- Various business taxes
- Head tax or poll tax

Tax-Sharing

- State liquor tax
- State fuel tax
- State lodging tax
- State insurance premiums tax
- State general retail sales tax
- State leasehold excise tax
- State waste taxes
- State utility tax
- State severance taxes

Other Revenue

- Federal and state grants
- User fees
- Investment and enterprise income
- Licenses, permits, fines

Innovation: The “Penny” Tax



Example: A Local Penny Tax

- Some 36 US states allow local governments to levy some type of general or broad-based local sales tax.
- Many of these local general sales taxes have been put into play specifically to help fund local infrastructure needs.
- About 12% of all local government tax revenue in the US accrues from various forms of local sales taxation.
- In the OECD, only local governments in Spain, Portugal, Hungary, and Turkey use sales taxes more than the US.
- The maximum allowable local sales tax rate ranges from a low of 0.25% in Mississippi to a whopping 8.0% in Alabama.

Example: A Local Penny Tax

- In 2008, the maximum local sales tax rate averaged across the 36 states was 3.2% but the average rate used was 1.5%. There is unused tax capacity.
- Many, if not most, of the local sales taxes are imposed by voters themselves through a referendum.
- Agencies track these referendums. Between 2000 and 2010, almost 400 state and local referendums were held on imposition of various taxes, many including new sales taxes. Almost 75% of these “ballot initiatives” have been successful.
- If tax revenues are geared toward purposes that voters value, they will support new tax measures.

Example: A Local Penny Tax

- Local infrastructure needs are very large, but local taxation powers are restricted to the property tax.
- Property taxes fail to keep pace with inflation and growth, and must be intentionally raised to generate growing revenue. This is politically hard.
- Sales taxes have a built-in “escalator” that sees tax revenue growing alongside the economy and increases in consumer spending. The tax also captures inflation, and allows all those who “visit” our cities to help pay for the infrastructure and services they use.
- Conditions in Canada may be aligning. The federal government dropped the GST from 7% to 5%, and invited provinces and municipalities to move in and use the “vacated” tax room. Many provinces have also reduced their sales taxes. Tax room is available.

Example: A Local Penny Tax

Sales taxes in Canada are notoriously unpopular. Some polls show that sales taxes are among the least popular of all taxes despite the fact that they are more economically benign in that they tax consumption as opposed to savings and investment. Several unique features, however, would increase support:

- Piggy-back the Penny Tax off the federal GST
- Impose the tax across the broader city-regions
- Cap the tax rate at 1% by provincial legislation
- Implement the tax only upon voter approval via referendum
- Earmark all tax revenues for specific infrastructure projects
- Submit a list of projects to voters at the time of the referendum
- The tax were to lapse every six years via a sunset provision
- Return excess sales tax revenue via property tax abatements
- Issue a special annual report on the usage of all funds and projects



New Tools for New Times: Innovative Infrastructure Financing, Funding, and Delivery

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