
Best Practice Project Procurement: **Findings from an NZCID Delegation to Canada**

MARCH 2016





Introduction

How does the Government buy a road?
How does it pay for it? Who is responsible
if it floods, cracks or subsides? What
about a hospital, school or train station?

We expect the Government to provide major infrastructure which works, but few of us actually know how they do it. Bringing all the skills and resources, from builders and financiers to designers and planners, together to turn political commitments and strategic plans into basic services is project procurement.

In New Zealand, major public projects (\$30 million and above) are procured by individual transport, health, energy, education, corrections, water, defence and housing agencies. Each body follows its own processes, sources its own funding and engages its own suppliers. Opportunities to develop expertise in procurement are limited by the quantity and frequency with which capital projects are delivered and a narrow range of procurement models are employed.

Canada does it differently. Specialists within an independent Government agency are available and able to oversee the procurement and delivery of major public projects, regardless of portfolio or sector. They provide a single interface for the market, arrange financing and structure overall procurement seeking to achieve the best possible result.

Transferring responsibility for complex public procurement to one organisation facilitates greater specialisation of skills and promotes expertise. Costs can be reduced, projects aligned to meet need and ongoing risks to the taxpayer set at the most cost-effective level.

The Canadian model is simple, clear and delivering high performance public infrastructure. If replicated in New Zealand, an expert procurement agency could advise Government and, using the Investor Confidence Rating, provide varying levels of support to public agencies procuring major projects.

An opportunity exists to take the Canadian model and combine it with New Zealand's existing commitment to achieving wider public outcomes from infrastructure delivery.

A centralised and expert procurement agency could generate better outcomes from public infrastructure investment at less cost and should be investigated by the Government.

NZCID Delegation to Canada

Why Canada?

In October 2015, the New Zealand Council for Infrastructure Development led a delegation of 25 senior public and private officials to Canada to investigate how infrastructure there is planned, funded and delivered. The main sectors examined were health, education and transport. Site visits and briefings were arranged in Vancouver, British Columbia and Ottawa and Toronto, Ontario.

The Canadian delegation follows two similar visits by NZCID to Australia and the United Kingdom in 2014. Beside these two countries, Canada has perhaps the closest legal, cultural and socio-economic framework to New Zealand. Its 35 million person, C\$2 trillion-dollar economy is, however, noticeably larger with greater experience in infrastructure delivery.

Like New Zealand, Canada also developed a significant infrastructure deficit over several decades of underinvestment. Since the 1990s, it has been engaged in a protracted period of catch-up, putting it around a decade ahead of New Zealand in at least one important aspect of infrastructure policy – project procurement. As a partial consequence, Canadian infrastructure is generally considered better-quality than New Zealand's. In the most recent World Economic Forum Global Competitiveness Survey, for example, Canada placed 19th for overall infrastructure quality versus New Zealand's 29th.

Underpinning Canada's reinvestment in infrastructure has been private finance. Canada has become a global pioneer in public private partnerships (PPPs) and its flexible deployment of both public and private resources to deliver on time, on budget capital programmes has made it a leader in infrastructure procurement.

What the delegation saw

Over five days, the delegation was briefed on the structure and nature of Canadian infrastructure governance, planning, funding and procurement. Particular focus was paid to those sectors most represented on the delegation – transport, health and education – and to understanding the Canadian approach to PPPs.

Around 15 case studies were examined in detail and approximately ten of these viewed by members of the delegation. Site visits were organised into two streams, transport and social infrastructure, to allow a wider number of exemplars to be experienced. Projects investigated included:

- Abbotsford Hospital, British Columbia
- Evergreen Rail Line, Vancouver
- Confederation Line Light Rail, Ottawa
- Ottawa Cancer Centre
- Highway 407 ETR, Toronto
- Bridgepoint Hospital, Toronto

What the delegation learned

Following the delegation, each participant was asked by NZCID to provide feedback on key learnings. Over fifty separate points were received covering diverse aspects of Canada's general infrastructure framework. Responses included observations about Canada's governing arrangements and its evolving use of PPPs, as well as thoughts on planning, risk, competition, collaboration and other factors contributing to good infrastructure policy.

One feature, however, received more feedback than any other and was identified as a specific topic of interest for application in New Zealand: **Canadian major project procurement.**

Canada's PPP experience

Over the last two decades, Canada has emerged as a global leader in public-private partnerships. PPP, P3 or, in Ontario, AFP (Alternative Financing and Procurement) is a model for purchasing public infrastructure which involves risk transfer between a public client and its private sector delivery partner. In New Zealand, PPPs must include a long term relationship and private finance, but in Canada PPPs normally include, but do not require, these elements.

Around 250 PPPs are now either in operation or under development in Canada representing over C\$80 billion in capital investment. All Canadian provinces with a population above 500,000 have used and now consider PPPs for complex major projects, with the provinces of Ontario and British Columbia leading the way. The transport, health, education, defence, housing and justice sectors have all employed PPPs.

Around half of all Canadian PPPs operate in Ontario. A 2014 report of the province's PPP performance found 36 out of 37 projects were delivered on budget (the 37th project exceeded budgeted Infrastructure Ontario costs by 0.01 per cent).

What is Canada's major project procurement approach?

Canada uses specialist procurement agencies to deliver complex major projects. Agencies including Partnerships British Columbia, Infrastructure Ontario and PPP Canada act as public sector centres of excellence in procurement, advising on and overseeing the process which turns an investment concept into a physical asset. Agencies are publicly owned but independent bodies governed by a Board and operating in a commercial manner with a statutory purpose of providing value to tax payers.

This approach can be contrasted against the New Zealand model which sees almost all project procurement managed "in house". Public agencies like the New Zealand Transport Agency, Auckland Transport, the Ministry of Education, councils and district health boards individually oversee project delivery within their portfolio. As a rule, each sources its own funding, individually contracts services from the private sector and takes responsibility for the successful delivery and long term operation of the infrastructure service.

CASE STUDY

PPP Canada

PPP Canada acts as a leading source of expertise on PPP matters. They provide expertise and advice in assessing and executing PPP opportunities at the federal level as well as leveraging greater value for money from Government of Canada investments in provincial, territorial, municipal and First Nations infrastructure through the P3 Canada Fund.

PPP Canada is a federal Crown corporation with an independent Board of Directors reporting through the Minister of Finance to Parliament. The Corporation became operational in February 2009 and has completed 23 projects to date.

Benefits of the Canadian model

Institutional benefits

The principal reason why the Canadian specialised procurement approach appealed to delegates and has received recognition globally is that it delivers better value for money. This is achieved via efficiencies for public agencies and through improvements to the supplier marketplace:

In delivering more projects more often, centralised, specialist procurement bodies develop a breadth of experience which is not easily achieved inside a single portfolio with limited project opportunities. Greater experience facilitates productivity improvements as understanding among practitioners grows of the most efficient means to purchase capital services. Learnings are carried over from project to project as well as across sectors, spreading knowledge transfer and driving continuous improvement.

Enhanced experience and specialisation not only improves the procurement process, it increases the number of tools in the tool box. A variety of procurement models have evolved in Canada in response to constant improvements in institutional understanding of the best model for a given project. Different combinations of design, build, finance, maintain and operate project phases may be bundled together and capital, either public or private, is deployed according to value for money achieved through risk transfer. The Canadian approach is, as a consequence, significantly more flexible and better placed to insulate the taxpayer from project overruns.

CASE STUDY

Partnerships BC

Established in 2002, Partnerships BC supports the public sector in meeting its infrastructure needs by providing leadership, expertise and consistency in the procurement of complex capital projects by utilising private sector innovation, services and capital to deliver measureable benefits for taxpayers. Partnerships BC is owned by the Province of British Columbia and governed by a Board of Directors reporting to its sole Shareholder, the Minister of Finance. It has delivered 40 projects to date with a combined project value of \$17 billion.

CASE STUDY

Evergreen Line

The Evergreen Line is a C\$1.4 billion extension of the Sky-train system in Vancouver's east. Once complete in 2017, the 11km grade separated, elevated urban rail line will have 7 stations serviced by fully automated units. Unlike the Canada line, the Evergreen contract is short term and private finance is repaid upon construction completion. The project will then be transferred to the public, allowing authorities to operate the line as part of the wider Sky-train network.



"By establishing Infrastructure Ontario, the government set up an agency that was sophisticated enough to manage these sometimes complex and first-of-a-kind partnerships. This innovation brings to Ontario the best expertise in lending and project delivery, saving the government billions and resulting in better public facilities."

Globe and Mail

Market benefits

The creation of a dedicated expert agency to procure all major public projects also improves the functioning of the market.

Suppliers benefit from a single point of contact with the client. Consistent information from practitioners familiar with industry dynamics and public processes and experienced in procurement improves messaging around the needs, timing, priorities and aspirations of public clients.

The ability to proactively engage potential, as well as established, domestic and global partners and reach out to new suppliers improves competition. The transfer of ideas and technology across borders and sectors helps drive innovation and realise efficiencies. Sole oversight of major capital programmes facilitates development of a transparent, stable and deliverable project pipeline, giving confidence to the market that a missed opportunity can soon be recuperated. Outcomes include more private investment, lower cost projects and higher performing solutions.

CASE STUDY

Canada Line

The Canada line is a C\$2 billion 19km rail commuter line operating between Vancouver International Airport and the CBD. It has 16 stations, 9km of tunnels and is fully automated. Completed in 2009, it became North America's first public transport PPP with each of the design-build-finance-maintain-operate phases contracted to the private partner. The project was delivered by an independent special purpose public company, Canada Line Rapid Transit Inc., under contract with a private consortium.



“Ontario’s AFP [PPP] program has transformed how government and the private sector work together to build complex public infrastructure projects on time and on budget. Ontario’s approach has caught the attention of developers, constructors and financiers from around the world.”

Manuel Rivaya Fernandez-Santa Eulalia
Dragados Canada

Value for money

Institutional efficiency resulting from the Canadian approach is illustrated in comparisons of PPP procurement (monitoring of traditional procurement is poor, globally). A 2010 KPMG report found PPP processes were more rapid in Canada (taking on average 16 months to move from the release of tender documents to financial close) versus Australia (17 months) and the UK (34 months).

Faster processes were at least partly responsible for reducing costs to suppliers. The same KPMG report found Canadian bid costs to be around half that needed to tender for similar projects in Australia (who is itself a world leader in PPPs). Canadian officials highlight the importance of a strong project pipeline, strict adherence to project timetables, standardised documentation and the requirement for only around 30 per cent of design completed through tendering phases as critical to containing bid costs.

The result is that, on projects above \$100 million, Canadian agencies expect whole of life savings from PPPs to normally exceed 10 per cent compared to traditional procurement.

Scope ladders and gates

Examples of Canadian procedural innovations resulting from greater procurement specialisation include the use of ‘scope ladders’ and ‘gates’. **Scope ladders** are an approach to evaluating bids when budgets are limited. The price is fixed by the client and tendering parties bid on how much they can deliver for that price. **Gates** are the inverse. Bidders must meet certain project deliverables and otherwise bid largely on price.

CASE STUDY

Confederation Line

The Confederation Line is a 12km conversion of an existing bus route through central Ottawa which has reached capacity. The \$2.1 billion project includes 2.5km of tunnel and 13 stations and is scheduled for opening in 2018. Procured as a PPP, the private partner is contracted to design-build-finance and maintain the service for 30 years, however, the majority of capital has been financed publicly. Only \$300 million of private finance has been sourced and the majority of the project will be repaid using 12 milestone payments through construction.



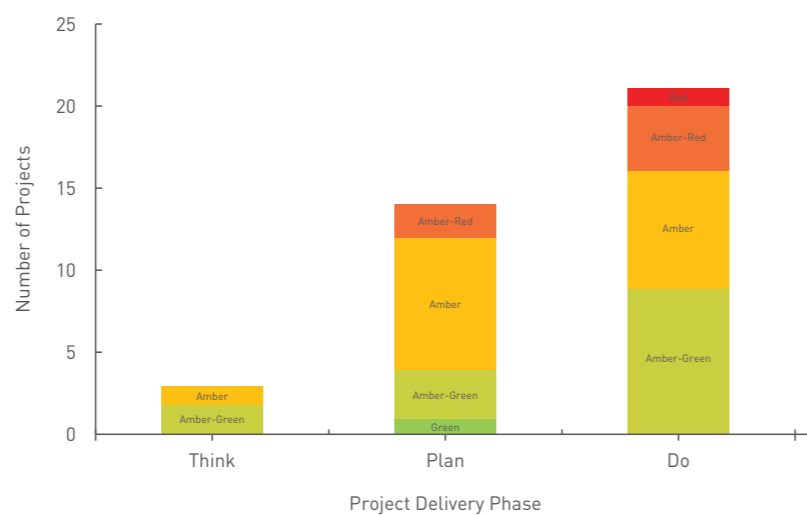
Specialised public procurement is needed in New Zealand

A 2015 NZCID survey of infrastructure suppliers (including contractors, designers, financiers and consultants) found that less than one-quarter of respondents rated public sector procurement expertise as good, compared to 53 per cent for private sector procurement.

Only one public agency, the New Zealand Transport Agency, was consistently rated by delivery partners as performing at a 'good' 4 out of 5-star level across 19 different procurement activities. Overall public sector performance was rated between 2 and 3 out of 5, with underwhelming performance across categories including bid cost reduction and whole of life cost evaluation.

Monitoring of conventional project delivery performance is generally weak so, outside of PPP procurement, it is not clear what proportion of major projects are delivered on time, on budget and to specification. A 2015 report by the Treasury suggests there could be significant issues across government. The Major Projects Performance report examined 38 projects valued at over \$20 billion and found that none of the 21 projects underway were "highly likely" to be successfully delivered against budget, schedule, scope and benefits. Successful delivery across less than half appeared "probable" (amber-green) and one-third "feasible" (amber). On time, on budget, to scope delivery for the remaining five projects - almost one-quarter - was evaluated by Treasury as either being "in doubt" (amber-red) or "unachievable" (red).

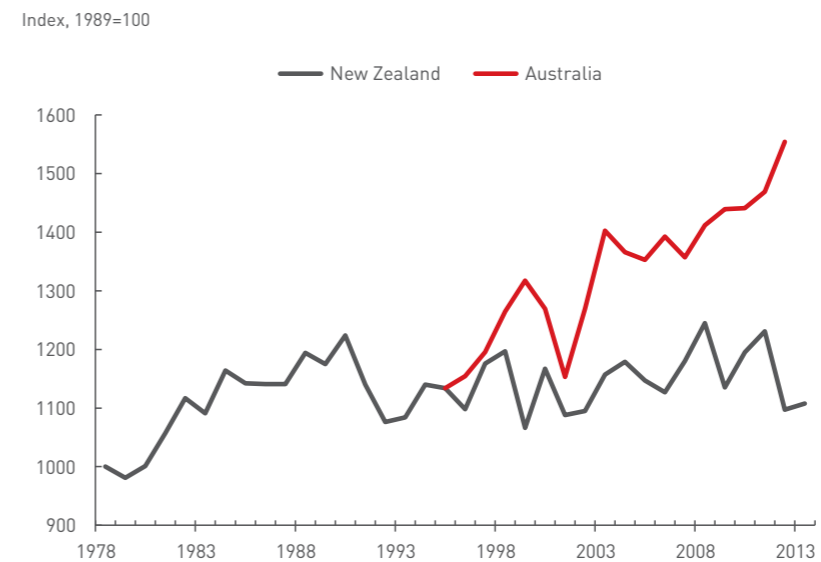
Major monitored project delivery confidence by project phase¹



¹ NZ Treasury, Major Projects Performance Report, March to June 2015.

The costs of sub-optimal procurement are felt not just by the taxpayer, but by industry as well. Extended efforts to collate major project information across the public sector have been impeded by a lack of data consistency and transparency. Treasury's resulting ten-year capital intentions plan is weakened by uncertainty that respective procuring authorities have the resources, conviction and wider public support required to deliver project priorities. In the absence of a clear line of sight of emerging infrastructure opportunities, suppliers underinvest in skills and capital assets, reducing productivity. Potential market entrants are deterred by a perceived lack of opportunity, with consequences for competition. The overall result is less upward pressure on value for money than is seen in some other markets.

Construction labour productivity in Australia and New Zealand²



² NZIER

Bridgepoint Hospital

Toronto's Bridgepoint Hospital is a new 470-bed facility for people with chronic disease and disability. Completed in 2013, the design-build-finance-maintain PPP demonstrated high value for money savings over traditional procurement of \$95 million or 15 per cent of the \$600 million contract value. Designed to consume 20 per cent less water, less energy and recycle stormwater for irrigation, the project also preserves an historic jail while providing for improved patient care.

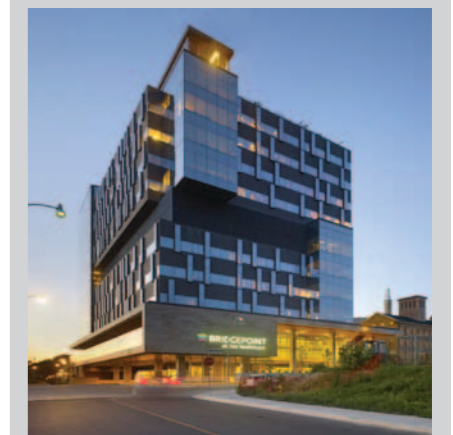


Photo: Plenary Health



CASE STUDY

Abbotsford Hospital

The 300 bed Abbotsford Regional Hospital and Cancer Centre was the first major hospital PPP in British Columbia. Completed in 2008, the design-build-finance-maintain contract demonstrated savings of \$39 million over traditional procurement, or just over 10 per cent on the \$350 million project.



Opportunities for New Zealand

Better public procurement

An agency operating as a centre of expertise for major project procurement across the country could achieve three-dimensional benefits for New Zealand:

Career procurement specialists with a robust, evidence-based understanding of New Zealand major projects and policy will reduce costs to the tax payer. Expertise in project procurement as a distinct activity will lead to productivity improvements via streamlined processes, shorter tendering periods and fit-for-purpose delivery models. Adherence to timeframes, fewer amendments to standard contracts and general procurement discipline in line with the Canadian experience will all lower the costs of procurement relative to the benefit obtained from high performing projects.

These core attributes can be supplemented with expertise in major project consenting, advisory and other services to provide a comprehensive one-stop-shop delivery agency. Ongoing monitoring, benchmarking and ex post evaluation will provide a platform for continuous improvement. Publication of consistent and comparable data will improve transparency, reducing public concerns over efficiency.

Better markets

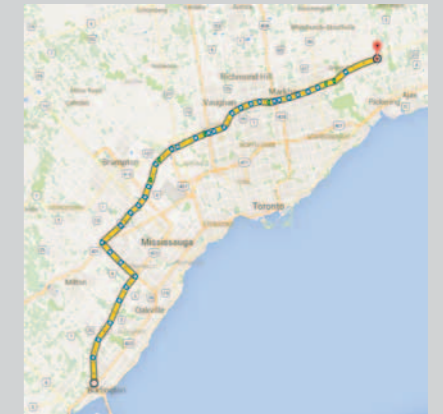
A single agency collating, coordinating and procuring the public's (local and central government) major capital programme will improve the functioning of the infrastructure supplier market. Development of a whole-of-government major project pipeline, including candidates for private financing, by a dedicated delivery body will lift market confidence in public sector capability. Suppliers will scale up or down, upskill staff and invest in productive capital in response to pending opportunities, leading to productivity gains in New Zealand's construction sector.

A consolidated agency will strengthen interface with the private sector, providing more consistent and reliable information about upcoming opportunities and objectives. Information flows in both directions will improve, with the market feeding back to procuring officials the state of supply-side conditions. Project sequencing will in turn be facilitated, helping to smooth demand for services and avoid the peaks and troughs which lead to skill losses, undercapitalisation and lower productivity.

CASE STUDY

Highway 407 ETR

The 407 is a privately owned and operated 108km toll road running adjacent to the free access Highway 401 in northern Toronto. The Express Toll Route is the world's first all-electronic open access motorway. Prices are dynamic and set at levels to ensure free-flow speeds at all times. The route itself is closely monitored and expanded as certain demand thresholds are reached.



Better services

The world view of a specialised procurement agency will be broader. Integration with the Australian major project environment will be closer, providing for regional consistency in the long term capital works programme. International suppliers with particular skill-sets can be targeted and will have a clear point of contact in New Zealand, fostering competition and helping to spread new ideas, skills and technology. Resulting downward pressure on infrastructure costs will increase the impact of each public dollar, generating society-wide benefits.

Improved procurement and supplier marketplaces will help elevate New Zealand major project procurement to global best practice, but combining the Canadian approach with New Zealand's existing outcomes focus creates an opportunity to take procurement one step further. A world leading procurement authority would procure integrated outcomes, not just projects.

A defining feature of New Zealand's PPP programme, in particular, is the focus on broader societal outcomes from infrastructure investment. In addition to delivering functional infrastructure services, New Zealand PPPs target less tangible, but ultimately more important, economic, social, cultural or environmental objectives: Auckland's Wiri Prison is not just a place for housing society's most dangerous, it is a facility designed and operated to reduce recidivism. Transmission Gully is not just a road, it must also deliver on improved safety and resilience objectives or penalties will be enforced.

A specialised agency with a high level of proficiency in the fundamentals of procurement will be capable of taking the services and outcomes delivered by physical infrastructure to the next level. Procurement experts versed in business case development operating across portfolios will be able to see through the sector benefits of major project delivery and actively promote key public outcomes – jobs, homes and economic growth – through capital investment.

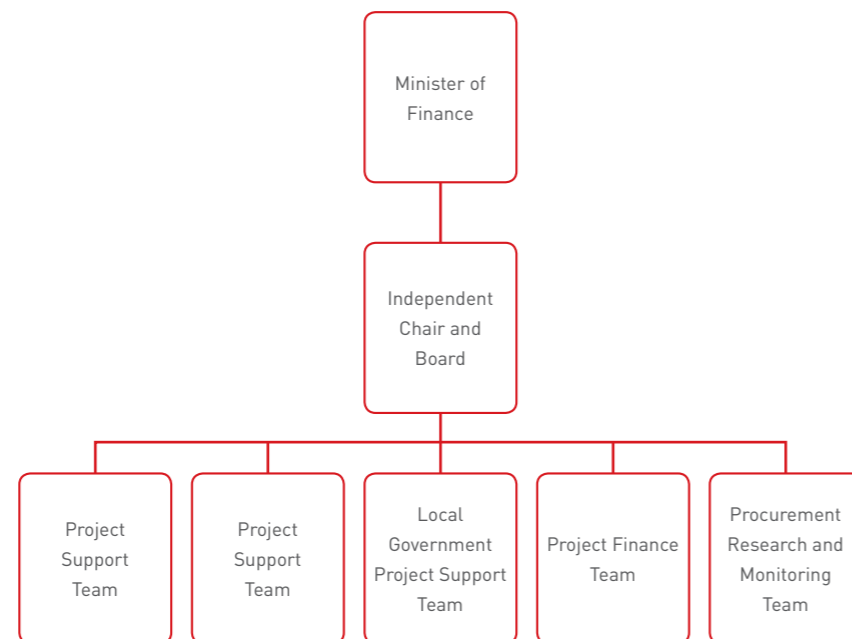
In the view of NZCID, a centralised, expert national procurement agency could and should be established to deliver improved procurement efficiency nationally and expand on existing efforts to deliver transformational public outcomes.

Major Projects New Zealand

Independent Governance

Based on the lessons and learnings from Canada, NZCID recommends that a specialist public sector procurement agency be considered for New Zealand. "Major Projects New Zealand" (MPNZ) would guide and where appropriate lead procurement of public projects above \$30 million. If modelled on successful Canadian exemplars, MPNZ would have the following characteristics:

MPNZ would be governed by a Board and CEO, reporting to the Chair of the Cabinet Economic Growth and Infrastructure Committee (currently Minister of Finance Bill English). The responsible Minister would appoint the Board based on expertise and experience in the public and private sectors. The Board would be required to give effect to the Investment Management and Asset Performance framework approved by Cabinet, but its operations would be functionally independent from wider government Ministries and agencies.



Commercial Focus and Operation

MPNZ would operate commercially, charging a fee for advice and guidance. This fee could either be paid for by client organisations or the Government, on their behalf, or shared. The purpose of charging across different public agencies is to ensure value for money, drive best practice and facilitate performance monitoring. As high fees may create an incentive for client organisations to favour "in house" procurement, a contribution from wider Government may be required.

MPNZ would be guided by the objective of delivering value for money for taxpayers. An average 5 per cent whole of life saving should be targeted across major projects. The 2015 Capital Intentions Plan identifies \$47.6 billion of major projects across central government and a further \$30.6 billion across local government planned for the next decade alone. An achievable 5 per cent average construction saving across this programme represents an almost \$4 billion opportunity. This would enable the next 170 largest local government investments to be constructed for no extra cost.

Centre of Excellence

MPNZ would become the hub for procurement research, expertise and advice across the public sector. By monitoring and benchmarking procurement activities across public agencies and against comparator countries like Australia and Canada, MPNZ would drive continual improvement in the delivery of public assets. Included in monitoring responsibilities would be approximate five-yearly ex poste evaluations of project performance against business case assumptions to ensure project expectations are being met.

Staff would be relocated from existing procurement departments inside the Treasury, the Ministry of Business, Innovation and Employment and New Zealand Transport Agency. Establishment advice could be sought from Partnerships BC, Infrastructure Ontario and PPP Canada.

SRO Initiative

The Single Room Occupancy renewal initiative will restore and renew 13 hotels in central Vancouver. The buildings are around 100 years old and provide low cost accommodation for some of Vancouver's most disadvantaged communities. The \$140 million capital cost design-build-finance-maintain contract will renew 900 rooms for residents who are not otherwise able to find accommodation. Improved housing has seen a decline in police call outs to the area and will be complete in 2016.



MPNZ would be responsible for developing a national major projects pipeline. Candidates for private finance would be identified, subject to demonstrating value for money. Project timeframes would be phased to manage, as far as possible, national investment peaks and troughs. New Zealand's largest projects (\$100 million and above) would be fed into a single Australasian major projects pipeline designed to leverage regional investment, skills and expertise.

Shared Responsibility

MPNZ would work alongside client organisations, including local authorities, as a procurement partner, and would not assume sole responsibility for project delivery. Ongoing operation, ownership and accountability for delivering quality public services would remain with the responsible Ministry, authority, agency or other public body. MPNZ would seek at all times to foster and grow the capability of client organisations. It would monitor performance of the asset and contract.

The Government's Investor Confidence Rating scheme would be used to determine whether a public body could choose whether or not to commission the assistance of MPNZ. Bodies with a proven track record in efficient project procurement could opt not to employ MPNZ, while those with less experience would be required to, if instructed by the responsible Minister.

Risk Oriented

Identification and appropriate allocation of risk to generate best value whole of life public assets would be the overriding objective of MPNZ. All aspects of major project procurement – from design, build and finance through to operation and maintenance – would be variously bundled or separated from other components to achieve optimum value for money.

Opportunities to leverage private capital would be exhaustively investigated to offset costs to the public. Private finance would be used where whole of life savings from innovation and risk transfer demonstrate value over and above public funding options. Additional private revenue sources, including through value capture, user and beneficiary pays mechanisms, would be pioneered by MPNZ.

Outcomes Driven

Ultimately, the purpose of MPNZ would be to deliver projects which promote better public outcomes. Optimum long term value, as opposed to lowest short term cost, would be a priority. Value would be assessed not only in relation to sectoral objectives, but broad societal outcomes, integrating the activities of multiple public and private parties. Employment, housing and rising prosperity would be the metrics against which project value is assessed and funding prioritised.

NZCID Recommendation

NZCID believes there is merit in the Canadian approach to infrastructure procurement. NZCID recommends that a specialist public sector procurement agency be considered for New Zealand.

Infrastructure Ontario

Infrastructure Ontario is a Crown corporation owned by the Province of Ontario that provides a wide range of services to support the Ontario government's initiatives to modernise and maximise the value of public infrastructure and realty. The organisation has four lines of business that deliver results directly to clients and stakeholders:

- **Major Projects** – management and delivery of complex Provincial and other public sector infrastructure projects
 - **Real Estate Services** – satisfy responsibilities as a landlord to public services in Ontario and meet short and long-term multi-year portfolio plan objectives
 - **Infrastructure Lending** – affordable long-term financing to help build and renew municipal and other eligible public infrastructure
 - **Commercial Projects** – leverage private sector partnerships and investments for revenue generation, cost reduction, and efficiency in government services and investments
- The Ministry of Economic Development, Employment and Infrastructure in consultation with other government ministries, assesses, prioritizes and determines the overall infrastructure renewal budget. The ministry also identifies which projects will be assigned to Infrastructure Ontario. Infrastructure Ontario's main responsibilities include:
- leading and implementing the procurement process
 - assisting project owners with bid documents, including design and output specifications
 - receiving and evaluating submissions
 - negotiating and awarding contracts
 - project managing the construction of the project at the request of the project owner

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