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## Value for Money Assessment

### Thunder Bay Consolidated Courthouse





**KPMG LLP**  
Bay Adelaide Centre  
333 Bay Street, Suite 4600  
Toronto ON M5H 2S5

Telephone (416) 777-8500  
Fax (416) 777-8818  
Internet www.kpmg.ca

Infrastructure Ontario  
777 Bay Street  
Toronto, Ontario  
M5G 2C8  
Attn: Jim Cahill

**Re: Final Value for Money Assessment – Thunder Bay Consolidated Courthouse**

Dear Mr. Cahill:

KPMG LLP (“KPMG”) has prepared the Value for Money (“VFM”) assessment for the Thunder Bay Consolidated Courthouse Project (“Project”) at the Financial Close stage, in accordance with our letter of engagement with Infrastructure Ontario (“IO”) and IO’s methodology *Assessing Value for Money: A Guide to Infrastructure Ontario’s Methodology*. This methodology is consistent with approaches used in other jurisdictions.

The VFM assessment is based on a comparison of the total project costs at the Financial Close Date for the Project under:

1. The traditional delivery approach, as reflected in the Public Sector Comparator (“PSC”) model; and
2. The Alternative Finance and Procurement approach (“AFP”), incorporating the Successful Bidder’s proposed costs.

The VFM assessment was calculated using the following information (collectively the “Information”) within the VFM model:

- i. A Risk Matrix developed for IO by Altus Group and adapted by IO to reflect Project specific risks; and
- ii. Cost and other input assumptions extracted from the bid submitted by the Successful Bidder and other VFM model assumptions as provided by IO.

We have not audited or attempted to independently verify the reasonableness, accuracy or completeness of the Information.

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Based on our understanding of IO's VFM methodology, we can confirm that, the Information has been appropriately used in the VFM model, and that the VFM assessment demonstrates the AFP approach provides estimated cost savings of 6.80% in comparison to the traditional delivery approach.

Yours very truly

A handwritten signature in black ink that reads 'Will Lipson'.

KPMG LLP

Will Lipson  
*Managing Director*  
Toronto, Ontario  
February 28, 2011

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Knowles

A Hill International Company

October 4, 2010

**Yaprak Berktin, Project Manager**

**Infrastructure Ontario**

777 Bay Street, 6th Floor

Toronto, ON M5G 2C8

Dear Ms. Berktin:

Re: **Thunder Bay Consolidated Courthouse**  
**Infrastructure Ontario RFP No. OIPC-09-50-I002**

Knowles Consultancy Services Inc. was retained to provide fairness monitoring services for the captioned project. Our role was to review Infrastructure Ontario's procurement process from issue of the RFP to the evaluation of proposals. This was done to ensure that the process was in accordance with the provisions of the RFP documents.

Only parties that were pre-qualified through the project's Request for Qualifications process that preceded the RFP were eligible to participate.

Our conclusions are based on our first hand observations of the process, the documents used and information provided by the procurement project team. We have provided Infrastructure Ontario with a detailed report on the RFP process.

In our capacity as fairness monitor, we:

- Took the process established in the RFP as our point of reference;
- Attended all confidential meetings with proponents;
- Monitored communications with proponents; and,
- Monitored the evaluation process.

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1599 Hurontario Street, Suite 106, Mississauga, ON L5G 4S1  
905.891.2555 www.jrknowles.com



As Fairness Monitor we can attest that the overall process followed was generally consistent with the stipulations of the RFP and general principles of fairness. This includes the following aspects of the process:

- Communications with proponents, including commercially confidential meetings;
- Management of conflict of interest;
- Preservation of the confidentiality of documents and information;
- Structure of the evaluation committee and evaluation teams to prevent any individual from having undue influence over the process;
- Competent, diligent and consistent application of only the criteria published in the RFP in performing the evaluation; and,
- General consistency of treatment of proponents throughout the process.

As a result of the procurement process:

- Three proposals were received from the pre-qualified proponents for this competition; and,
- After evaluation, the highest ranking proponent was named Preferred Proponent.

In conclusion, we can attest that, within the framework established by the RFP, the evaluation process was conducted in a procedurally fair, open and transparent manner.

Yours truly,  
Knowles Consultancy Services Inc.



Don Solomon

cc. Roger Bridges



**Architectural rendering of the Thunder Bay Consolidated Courthouse**

*Courtesy of Plenary Justice Thunder Bay*

**Highlights of the Thunder Bay Consolidated Courthouse**

<p>Courthouse Features</p>	<p>The Thunder Bay Consolidated Courthouse will be a new multi-storey building including:</p> <ul style="list-style-type: none"> <li>• 15 courtrooms and four conference/settlement suites.</li> <li>• Barrier-free design including barrier-free public access to courtrooms, infrared hearing assistance and barrier-free witness stand and jury box.</li> <li>• Enhanced accommodation for interpretation including one jury room permanently equipped for simultaneous interpretation and two portable interpretation booths.</li> </ul>
<p>Environmentally Sustainable Design</p>	<p>A commitment to meet the Leadership in Energy and Environmental Design (LEED) Silver standard, including:</p> <ul style="list-style-type: none"> <li>• focus on energy efficiency;</li> <li>• high quality indoor environment through building material selections;</li> <li>• green housekeeping practices;</li> </ul>

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## Summary

*ReNew Ontario 2005-2010* is a \$30-billion-plus strategic infrastructure investment plan to modernize, upgrade and expand Ontario's public infrastructure.

Infrastructure Ontario is an essential component of the *ReNew Ontario* plan. The Crown corporation ensures that new infrastructure projects are delivered on time and on budget.

The new Thunder Bay Consolidated Courthouse is being delivered under the Province's Alternative Financing and Procurement (AFP) model.

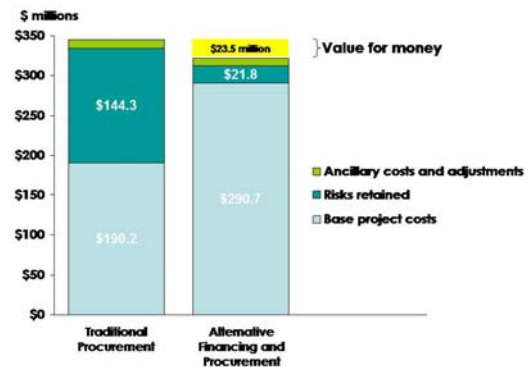
The courthouse will improve justice services in Thunder Bay by consolidating the courts of the Superior Court of Justice and Ontario Court of Justice, which currently operate in separate locations. The new multi-storey building, which will be built between Brodie and Archibald streets, south of Miles Street in Thunder Bay's downtown south core, will have space to accommodate 15 courtrooms and four conference/settlement suites.

The purpose of this report is to provide a summary of the project scope, the procurement process and the project agreement, and to demonstrate how value for money was achieved by delivering the Thunder Bay Consolidated Courthouse project through the AFP process.

The value for money analysis refers to the process of developing and comparing the total project costs under two different delivery models expressed in dollar values measured at the same point in time. Value for money is determined by directly comparing the cost estimates for the following two delivery models:

Model #1 Traditional project delivery (Public sector comparator)	Model #2 Alternative financing and procurement
Total project costs that would have been incurred by the public sector to deliver an infrastructure project under traditional procurement processes.	Total project costs incurred by the public sector to deliver the same infrastructure project with identical specifications using the AFP approach.

The cost difference between model #1 and model #2 is the estimated value for money for this project.



The value for money assessment of the Thunder Bay Consolidated Courthouse project indicates estimated cost savings of 6.8 per cent or \$23.5 million, by using the AFP approach in comparison to traditional delivery.

KPMG LLP completed the value for money assessment of the Thunder Bay Consolidated Courthouse project. Their assessment demonstrates projected cost savings of 6.8 per cent by delivering the project using the AFP model, versus what it would have cost to deliver the project using a traditional delivery model.

Knowles Consultancy Services Inc. acted as the Fairness Monitor during the procurement phase of the project. They reviewed and monitored the communications, evaluations and decision-making processes associated with the Thunder Bay Consolidated Courthouse project procurement, ensuring the fairness, equity, objectivity, transparency and adequate documentation of the process. Knowles certified that these principles were maintained throughout the procurement process (please see letter on page 3).

Infrastructure Ontario will work with the Ministry of the Attorney General to develop the new courthouse, which will remain publicly owned, publicly controlled and publicly accountable.

## Project description

### Background

ReNew Ontario 2005-2010 is a \$30-billion-plus strategic infrastructure investment plan to modernize, upgrade and expand Ontario's public infrastructure.

Infrastructure Ontario is an essential component of the ReNew Ontario plan. The Crown Corporation was created in 2005, to ensure that infrastructure projects are delivered on time and on budget.

Under the ReNew Ontario plan, projects are assigned to Infrastructure Ontario by the provincial government, which uses a made-in-Ontario project delivery model called Alternative Financing and Procurement (AFP). AFP brings private-sector expertise, ingenuity and rigour to the process of managing and renewing Ontario's public infrastructure while shifting risks associated with cost and schedule overruns away from the public sector.

Ontario's public infrastructure projects are guided by the five principles set out in the provincial government's *Building a Better Tomorrow Framework*, which include:

- public interest is paramount;
- value for money must be demonstrable;
- appropriate public control and ownership must be preserved;
- accountability must be maintained; and
- all processes must be fair, transparent and efficient.

### **Thunder Bay Consolidated Courthouse**

The new Thunder Bay Consolidated Courthouse will be located between Brodie and Archibald streets, south of Miles Street, in Thunder Bay's downtown south core. The new facility will consolidate the Superior Court and Ontario Courts of Justice currently operating in three locations across the Thunder Bay.

Consolidating court services into a single location will provide a modern, effective and accessible

courthouse for the community. It will also benefit court users and the community by allowing for a more effective use of resources.

### **Job Creation**

The project will provide a sizeable boost to the regional and Ontario economies during construction by directly and indirectly supporting and creating hundreds of jobs. At the peak of construction, it is estimated that 225 workers will be on site daily.

### **Project Scope**

The Thunder Bay Consolidated Courthouse has been designed with environmentally responsible and sustainable features and will be certified under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System. The design includes a focus on energy efficiency, healthy indoor environments and reduced greenhouse gas emissions.

The new multi-storey building will have the space to accommodate 19 judicial rooms, comprised of 15 courtrooms and four conference settlement rooms. It will be designed with capacity for expansion and internal flexibility to ensure maximum usefulness throughout its lifetime.

The courthouse features a contemporary design that fits into the downtown context and provides a new civic plaza in downtown Thunder Bay.

The Thunder Bay Consolidated Courthouse features barrier-free design, including:

- barrier-free courtrooms;
- infrared hearing assistance;
- barrier-free witness stand, jury box and spectator positions in all courtrooms.

The Thunder Bay Consolidated Courthouse project will improve and expand courthouse facilities in Thunder Bay for all users by consolidating all justice services in one facility that is designed to provide a healthy, productive environment.

## Competitive selection process timeline

The Ministry of the Attorney General has entered into a project agreement with Plenary Justice Thunder Bay LLP to design, build, finance and maintain the project. The procurement stages for the project were as follows:

### **May 1, 2009**

#### *Request for Qualifications*

In May 2009, the Ministry of the Attorney General and Infrastructure Ontario issued a request for qualifications (RFQ) for the project. Three building teams were short-listed:

- **Forum Social Infrastructure** – Forum Equity Partners, Stantec Architecture Ltd. / Rosser International Inc., Dominion Construction Co. Inc., SNC-Lavalin Operations & Maintenance Inc.
- **Integrated Team Solutions** – EllisDon Corporation, Fengate Capital Management Ltd., NORR Ltd / AECOM Design, Honeywell Ltd, Scotia Capital (Financial Advisor)
- **Plenary Justice** – Plenary Group, Adamson Associated Architects / Ricci Green Associates, Bird Design-Build Construction Inc, Johnsons Controls LP, TD Securities (Financial Advisor)

### **September 18, 2009**

#### *Request for Proposals*

A request for proposals (RFP) was issued to the short-listed proponents, setting out the bid process and proposed project agreements to design, build, finance and maintain the project.

#### *Proposal submission*

The RFP period closed on May 20, 2010. Three bids were received by Infrastructure Ontario and the Ministry of the Attorney General. The bids were evaluated using the criteria set out in the RFP.

### **September 17, 2010**

#### *Preferred proponent notification*

Plenary Justice was selected as the successful RFP proponent based on predetermined criteria, including construction schedule, technical requirements, price, operational and management plans and financing package, in accordance with the evaluation criteria set out in the RFP.

### **November 18, 2010**

#### *Commercial close*

A project agreement was executed by Plenary Justice and Infrastructure Ontario as agent for the Province of Ontario.

### **November 19, 2010**

#### *Financial close*

Construction financing for the Thunder Bay Consolidated Courthouse is being provided by The Toronto-Dominion Bank (TD Bank) and The Manufacturers Life Insurance Company (Manulife) with TD Securities as the hedge provider. Long-term financing is being arranged by OPB Investments Inc. ("Ontario Pension Board"), BCE Master Trust Fund (BIMCOR) and Canada Life Assurance Company (Canada Life). Equity is provided by Plenary Group.

### **November 2010 – September 2013**

#### *Construction*

During the construction period, the builder's construction costs will be funded by its lenders in monthly instalments based on the construction program set out by Bird Design-Build Construction.

Construction will be carried out in accordance with the project agreement. The project will be overseen by a joint building committee made up of representatives from the Ministry of the Attorney General and Infrastructure Ontario.

#### *Completion and payment*

Plenary Justice will receive a payment from the province at substantial completion of the Thunder Bay Consolidated Courthouse, which is expected in September 2013. This payment will be followed by monthly service payments over a 30-year period for construction of the facility, building maintenance, life-cycle repair and renewal, and project financing.

### **September 2013 – August 2043**

#### *Maintenance*

Plenary Justice will maintain the new courthouse for 30 years and be responsible for building maintenance, repair and life-cycle replacement during that period.

## Project agreement

### *Legal and commercial structure*

Infrastructure Ontario entered into a project agreement with Plenary Justice, comprising approximately 33 months of construction and a 30-year maintenance timeframe. Under the terms of the project agreement, Plenary Justice will:

- design and build the Thunder Bay Consolidated Courthouse project;
- finance the construction and capital costs of the new courthouse over the term of the project;
- obtain a third-party independent certification that the new courthouse is built in accordance with the project agreement;
- provide facility management and life-cycle maintenance for the new courthouse for the 30-year service period under pre-established maintenance performance standards set out in the project agreement; and
- ensure that, at the end of the contract term, the building meets the conditions specified in the project agreement.

The Province will make monthly payments to Plenary Justice, based on performance requirements defined in the project agreement. The Province will not commence these payments until the new courthouse is substantially complete. Moreover, if Plenary Justice does not meet the standards set out in the agreement, it will face financial deductions.

Plenary Justice will receive a payment from the Province at substantial completion of the new courthouse, which is expected in September 2013. This payment will be followed by monthly service payments over a 30-year period for construction of the facility, building maintenance, life-cycle repair and renewal and project financing.

**The Thunder Bay Consolidated Courthouse will continue to be publicly owned, publicly controlled and publicly accountable. Court services will continue to be publicly funded and publicly administered – this is non-negotiable for the Government of Ontario and more importantly, for the people of Ontario.**

The construction and facility management team will be granted a licence to access the site and courthouse in order to provide the construction and facility maintenance services over the term of the agreement. However, as noted above, the new courthouse will at all times remain publicly owned and the construction and facility management team are contractually obligated to follow the terms of the project agreement.

### **Facility management and maintenance**

#### **Facility management**

Services associated with the day-to-day management of the physical facility, such as maintaining the elevator, electrical and mechanical systems, ventilation systems and other similar maintenance work.

#### **Life-cycle maintenance**

Life-cycle maintenance represents the total cost of replacing, refurbishing and refreshing building structure and systems over their useful life. With respect to this project, "life-cycle costs" will involve the replacement of the facility's base building elements that have exceeded their useful life (e.g., floor finishes and certain mechanical and electrical components); these components must be left in a state acceptable to the government at the completion of the 30-year maintenance agreement. Life-cycle costs are typically capital costs.

***Construction and completion risk***

All construction projects have risks. Some project risks are retained in varying magnitude by the public sector. Examples of risks retained by the public sector under either the AFP or traditional model include planning, unknown site conditions, changes in law, public sector initiated scope change, and force majeure (shared risk).

Under the AFP model, some key risks that would have been retained by the public sector are contractually transferred to Plenary Justice. On a traditional project, these risks and resource availabilities can lead to cost overruns and delays. Examples of risks transferred to the private sector under the AFP project agreement include:

Construction price certainty

Plenary Justice will finance and construct the new courthouse. Plenary Justice will receive a payment from the Province at substantial completion of the new courthouse, which is expected in September 2013. This payment will be followed by monthly service payments over a 30-year period for construction of the facility, building maintenance, life-cycle repair and renewal and project financing.

Plenary Justice's payment may only be adjusted in very specific circumstances, agreed to in advance and in accordance with the detailed variation (or change order) procedures set out in the project agreement.

Scheduling, project completion and delays

Plenary Justice has agreed to reach substantial completion of the facility by September 2013. The construction schedule can only be modified in very limited circumstances, in accordance with the project agreement. Plenary Justice's monthly service payments will not commence until substantial completion has been achieved (i.e., until it has completed building the new courthouse and it has been certified as substantially complete by an independent consultant). Costs associated with delays that are the responsibility of Plenary Justice must be paid by Plenary Justice.

Site conditions and contamination

Plenary Justice accepted the site and the site conditions and shall have highly limited recourse against the Province related to site conditions. Furthermore, Plenary Justice shall be responsible for remediation of any contamination at the site that was disclosed in or could have been reasonably anticipated from the environmental reports or any of the geotechnical reports, or that is caused by Plenary Justice or any of its parties.

Development approvals

Plenary Justice is responsible for applying, obtaining, maintaining, renewing and complying with all development approvals.

Mechanical and electrical systems responsibility

Plenary Justice shall be responsible for:

- any issues with respect to the functionality, durability, maintainability and life-cycle cost of the mechanical and electrical systems specified in their design, including whether such systems will be adequate to meet the output specifications on a consistent basis for the duration of the operational term; and
- the operation and periodic replacement of all elements of the facility, whether part of the mechanical and electrical systems or otherwise, including finishes, seals, structural components, hardware and building fabric, as required to achieve the output specifications for the duration of the operational term.

Construction financing

Plenary Justice is required to finance the construction of the project until the new courthouse is substantially complete and the Ministry of the Attorney General can occupy the facility. Plenary Justice will be responsible for all increased financing costs should there be any delay in Plenary Justice reaching substantial completion. This shifts significant financial risk to Plenary Justice in the case of late delivery.

#### Commissioning and facility readiness

Plenary Justice must achieve a prescribed level of commissioning of the new courthouse at substantial completion and must co-ordinate the commissioning activity within the agreed-upon construction schedule. This ensures that the Province will receive a functional building facility at the time payments to Plenary Justice commence. Plenary Justice will work closely with the Ministry of the Attorney General to facilitate transition from the existing facilities to the new facility.

#### Activity protocols

Plenary Justice and Infrastructure Ontario have established a schedule for project submittals taking into account the time for review needed by Infrastructure Ontario's compliance architect, the Ministry of the Attorney General's architect and courthouse users, as required.

This protocol mitigates against Plenary Justice alleging delay as a result of an inability to receive responses in a timely manner in the course of the work.

#### Change order protocol

In addition to the variation procedure set out in the project documents, Infrastructure Ontario's protocols set out the principles for any changes to the project work/scope during the construction period, including:

- requiring approval and processing of change orders from Infrastructure Ontario the Ministry of the Attorney General;
- specifying the limited criteria under which change orders will be processed and applied;
- timely notification of change orders to Infrastructure Ontario; and
- approval by Infrastructure Ontario for owner-initiated scope changes.

#### ***Facilities maintenance risk***

As part of the project agreement, key risks associated with the maintenance responsibility (including life-cycle renewal) of the courthouse over the 30-year service period have been transferred to Plenary Justice. Plenary Justice' maintenance of the building's life-cycle repair and renewal must meet the performance requirements set out in the project agreement. Under the project agreement, Plenary Justice faces deductions to its monthly payments if it does not meet its performance obligations.

In addition to the transfer of the above key risks to Plenary Justice under the project documents, the financing arrangement entered into between Plenary Justice and its lenders ensures that the project is subject to additional oversight, which may include:

- an independent budget review by a third-party cost consultant;
- monthly reporting and project monitoring by a third-party cost consultant; and
- the requirement that prior approval be secured for any changes made to the project budget in excess of a pre-determined threshold.



## Achieving value for money

For the Thunder Bay Consolidated Courthouse project, KPMG's value for money assessment demonstrates a projected cost savings of 6.8 per cent or \$23.5 million, by using the alternative financing and procurement (AFP) approach, as compared to the traditional procurement approach.

KPMG LLP was engaged by Infrastructure Ontario to independently assess whether – and, if so, the extent to which – value for money will be achieved by delivering this project using the AFP method. Their assessment was based on the value for money assessment methodology outlined in *Assessing Value for Money: A Guide to Infrastructure Ontario's Methodology*, which can be found at [www.infrastructureontario.ca](http://www.infrastructureontario.ca). The approach was developed in accordance with best practices used internationally and in other Canadian provinces, and was designed to ensure a conservative, accurate and transparent assessment. Please refer to the letter from KPMG on page 1.

### Value for money concept

The goal of the AFP approach is to deliver a project on time and on budget and to provide real cost savings for the public sector.

The value for money analysis compares the total estimated costs, expressed in today's dollars and measured at the same point in time, of delivering the same infrastructure project under two delivery models - the traditional delivery model (public sector comparator or "PSC") and the AFP model.

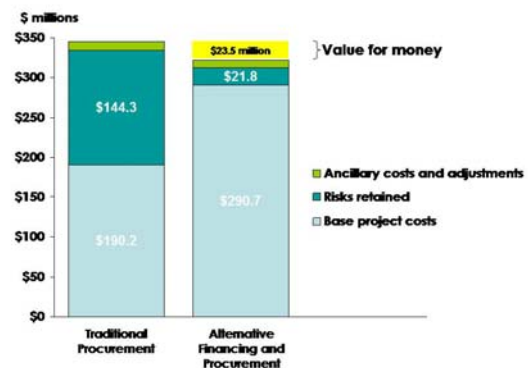
Model #1 Traditional project delivery (Public sector comparator)	Model #2 Alternative financing and procurement
Total project costs that would have been incurred by the public sector to deliver an infrastructure project under traditional procurement processes.	Total project costs incurred by the public sector to deliver the same infrastructure project with identical specifications using the AFP approach.

The cost difference between model #1 and model #2 is referred to as the value for money. If the total cost to deliver a project under the AFP approach (model #2) is less than the total cost to deliver a project under the traditional delivery approach (model #1), there is said to be positive value for money. The value for money assessment is completed to determine which project delivery method provides the greatest level of cost savings to the public sector.

The cost components in the VFM analysis include only the portions of the project costs that are being delivered using AFP. Project costs that would be the same under both models, such as land acquisition costs, furniture, fixtures and equipment, are excluded from this VFM calculation.

The value for money assessment is developed by obtaining detailed project information and input from multiple stakeholders, including internal and external experts in project management and construction project management.

Components of the total project costs under each delivery model are illustrated below:



The value for money assessment of the Thunder Bay Consolidated Courthouse project indicates estimated cost savings of 6.8 per cent or \$23.5 million, by using the AFP approach in comparison to traditional delivery.

It is important to keep in mind that Infrastructure Ontario's value for money calculation methodology does not attempt to quantify a broad range of qualitative benefits that may result from using the AFP delivery approach. For example, the use of the AFP approach will more likely result in a project being delivered on time and on budget. The benefits of having a project delivered on time cannot always be accurately quantified.

These qualitative benefits, while not expressly quantified in this value for money analysis, are additional benefits of the AFP approach that should be acknowledged.

#### ***Value for money analysis***

For a fair and accurate comparison, the traditional delivery costs and AFP costs are present-valued to the date of financial close to compare the two methods of delivering a design, build, finance and maintain project at the same point in time. It is Infrastructure Ontario's policy to use the current public sector rate of borrowing for this purpose to ensure a conservative and transparent analysis. For more information on how project costs are time-valued and the value for money methodology, please refer to *Assessing Value for Money: A Guide to Infrastructure Ontario's Methodology*, which is available online at [www.infrastructureontario.ca](http://www.infrastructureontario.ca).

#### ***Base costs***

Base project costs are taken from the price of the contract signed with Plenary Justice, and include all construction, maintenance and financing costs. The base costs between AFP and the traditional delivery model mainly differ as follows:

1. Under the AFP model, the private party charges an additional premium as compensation for the risks that the public sector transfers to them under the AFP project documents. In the case of traditional delivery, the private party risk premium is not included in the base costs as the public sector retains these risks.
2. The financing rate that the private sector is charged under AFP is higher than the financing

rate of the public sector and is not included in the traditional delivery base costs.

In the case of the AFP model, the base costs are extracted from the price agreed among the parties under the project agreement. For the Thunder Bay Consolidated Courthouse project, these were \$290.7 million.

If the traditional model had been used for the Thunder Bay Consolidated Courthouse project, base costs are estimated to be \$190.2 million.

#### ***Risks retained***

Historically, on traditional projects, the public sector had to bear costs that go beyond a project's base costs because of the contingencies necessary developed to respond to the project risks.

Project risks are defined as potential adverse events that may have a direct impact on project costs. To the extent that the public sector retains these risks, they are included in the estimated project cost.

The concept of risk transfer and mitigation is key to understanding the overall value for money assessment. To estimate and compare the total cost of delivering a project under the traditional delivery versus the AFP method, the risks borne by the public sector (which are called "retained risks") should be identified and accurately quantified.

Comprehensive risk assessment not only allows for a fulsome value for money analysis, but also helps Infrastructure Ontario and the public sector sponsors to determine the party best able to manage, mitigate and/or eliminate the project risks and appropriately allocate those risks under the project documents.

Under the traditional delivery method, the risks retained by the public sector are significant. As discussed on pages 11-12, the following are examples of risks retained by the public sector under the traditional delivery method that have been transferred under the project agreement to Plenary Justice:

- design compliance with the output specifications;
- construction price certainty;
- scheduling, project completion and potential delays;
- design co-ordination;
- site conditions and contamination;
- development approvals;
- design and life-cycle responsibility;
- mechanical and electrical systems responsibility;
- construction financing;
- schedule contingency;
- coordination of equipment procurement installation;
- commissioning and facility readiness; and
- activity protocols.

Examples of these risks include:

- *Design coordination/completion:* Under the AFP approach, the builder is responsible for design coordination activities to ensure that the facility is constructed in full accordance with the design in the project agreement. The builder is responsible for inconsistencies, conflicts, interferences or gaps in these design documents, particularly in the plans drawings and specifications; and for design completion issues that are specified in these design documents but erroneously left out.
- *Scheduling, project completion and delays:* Under the AFP approach, the builder has agreed that it will provide the facility for use by the Ministry of the Attorney General by a fixed date and at a pre-determined price. Therefore, any extra cost (financing or otherwise) incurred as a result of a schedule overrun caused by the builder will not be paid by the Province, thus providing the builder a clear motivation to maintain the project's schedule. Further oversight includes increased upfront due diligence and project management controls imposed by the builder and the builder's lender.

Infrastructure Ontario retained an experienced, third-party construction consulting firm, Altus Helyar, to develop a template for assessing the project risks that the public sector relinquishes under AFP compared to the traditional approach. Using data from actual projects as well as its own knowledge base, the firm established a risk profile under both approaches for infrastructure facilities.

It is this generic risk matrix that has been used for validating the risk allocation for the specific conditions of the Thunder Bay Consolidated Courthouse project.

Using the AFP model reduces these results to the public sector. For example, had this project been delivered using the traditional approach, design coordination risks that arise would be carried out through a series of change orders issued during construction. Such change orders would, therefore, be issued in a non-competitive environment, and would typically result in a significant increase in overall project costs for the public sector.

The added due diligence brought by the private party's lenders, together with the risk transfer provisions in the project documents result in overall cost savings as these transferred risks will either be better managed or completely mitigated by Plenary Justice.

A detailed risk analysis of the Thunder Bay Consolidated Courthouse project concluded that the average value of project risks retained by the public sector under traditional delivery is \$144.3 million. The analysis also concluded that the average value of project risks retained by the public sector under the AFP delivery model decreases to \$21.8 million. This is a savings of \$122.5 million for Ontario taxpayers.

For more information on the risk assessment methodology used by Infrastructure Ontario, please refer to Altus Helyar's Risk Assessment Template DBFM projects, available at [www.infrastructureontario.ca](http://www.infrastructureontario.ca).

### *Ancillary costs and adjustments*

There are significant ancillary costs associated with the planning and delivery of a large complex project that vary depending on the project delivery method.

For example, there are costs related to each of the following:

- *Project management:* These are essentially fees to manage the entire project. Under the AFP approach, these fees will also include Infrastructure Ontario costs.
- *Transaction costs:* These are costs associated with delivering a project and consist of legal, fairness and transaction advisory fees. Architectural and engineering advisory fees are also incurred to ensure the facility is being designed and built according to the output specifications.

The ancillary costs are quantified and added to both models for the value for money comparison assessment. Both project management and transaction costs are likely to be higher under AFP given the greater degree of up-front due diligence. The ancillary costs for the Thunder Bay Consolidated Courthouse project under the traditional delivery method are estimated to be \$7.3 million as compared to \$9.8 million under the AFP approach.

An adjustment is made when estimating costs under traditional delivery. This adjustment is referred to as competitive neutrality and accounts for items such as taxes paid under AFP that flow back to the public sector and are not taken into account under the traditional model, and private sector insurance premiums that can be used as a proxy for valuing insurance costs when the public sector self-insures under the traditional method. In the case of the Thunder Bay Consolidated Courthouse project, this adjustment is made by adding \$3.9 million to the traditional delivery costs (i.e. on the PSC side).

For a detailed explanation of ancillary costs, please refer to *Assessing Value for Money: A Guide to Infrastructure Ontario's Methodology*, which is available online at [www.infrastructureontario.ca](http://www.infrastructureontario.ca)

### *Calculating value for money*

The analysis completed by KPMG LLP concludes that the additional costs associated with the AFP model are more than offset by the benefits which include: a much more rigorous upfront due diligence process, reduced risk to the public sector, and controls imposed by both the lenders and Infrastructure Ontario's standardized AFP procurement process.

Once all the cost components and adjustments are determined, the aggregate costs associated with each delivery model (i.e., traditional delivery and AFP) are calculated, and expressed in Canadian dollars, as at financial close. In the case of the Thunder Bay Consolidated Courthouse project, the estimated traditional delivery cost (i.e. PSC) is \$345.8 million as compared to \$322.3 million under the AFP delivery approach.

The positive difference of \$23.5 million or 6.8 per cent represents the estimated value for money by using the AFP delivery approach in comparison to the traditional delivery model.