Ontario

INFRASTRUCTURE ONTARIO

VALUE FOR MONEY ASSESSMENT

THE OTTAWA HOSPITAL REGIONAL CANCER PROGRAM REDEVELOPMENT PROJECT

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Infrastructure Ontario
777 Bay Street
Toronto, Ontario
M5G 2C8
Attn: Carole Malo

Re: Final Value for Money Assessment – Ottawa Hospital Regional Cancer Centre Project – The Ottawa Hospital

Dear Ms. Malo:

KPMG LLP ("KPMG") has prepared the Value for Money ("VFM") assessment for The Ottawa Hospital 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 substantial completion 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 Helyar 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.

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 11.79% in comparison to the traditional delivery approach.

Yours very truly

Will Lipson

KPMG LLP

Will Lipson
Managing Director
Toronto, Ontario
January 15, 2008

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Infrastructure Ontario
777 Bay Street
Toronto, Ontario
M5G 2C8
Attn: Carole Malo

Re: Final Value for Money Assessment – Ottawa Hospital Regional Cancer Centre Project – Queensway Carleton Hospital

Dear Ms. Malo:

KPMG LLP ("KPMG") has prepared the Value for Money ("VFM") assessment for the Queensway Carleton Hospital 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 substantial completion 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 Helyar 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.

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 11.73% in comparison to the traditional delivery approach.

Yours very truly

Will Lipson

KPMG LLP

Will Lipson
Managing Director
Toronto, Ontario
January 15, 2008

February 5th, 2008

Mr. Steven Richards
Vice President, Project Legal Services
Infrastructure Ontario
777 Bay Street, 6th Floor
Toronto, Ontario M5G 2C8

Subject: Ottawa Hospital Regional Cancer Centre Project RFP No.: OIPC-07-17-I018

Dear Mr. Richards:

P1-Consulting was engaged on October 19th, 2006 to act as the Fairness Commissioner for this procurement process (RFQ and RFP) to review and monitor the communications, evaluations and decision-making processes that were associated with the procurement process for the **Ottawa Hospital Regional Cancer Centre Project** in terms of ensuring fairness, equity, objectivity, transparency and adequate documentation of the evaluation process.

The primary objective of the Ottawa Hospital Regional Cancer Centre Project is to renew, revitalize and expand a publicly-owned facility while incorporating private sector innovation and expertise, using Infrastructure Ontario's build finance model. The RFP process was used to select a pre-qualified proponent to expand and redevelop new and/or renovated space for services.

The Ottawa Hospital - General will have an expansion of the existing Cancer Centre with the addition of four radiation therapy treatment rooms, supportive care, a new patient review area, expanded radiation support functions such as machine shop and quality assurance labs (replaced from the Civic facility), a new and enlarged systematic oncology treatment and pharmacy area and renovations to the existing facility to provide four outpatient clinics. The new construction and hospital renovations will be phased to provide uninterrupted patient services to the existing oncology program and The Ottawa Hospital as a whole.

The Queensway-Carleton Hospital Campus, as the second Site of the project, will see construction of a new freestanding ambulatory care cancer treatment facility, with three radiation therapy treatment rooms, but planned to expand to seven treatment rooms. There will be two outpatient clinic pods, a supportive care area with counselling rooms, a full floor of systemic therapy and satellite pharmacy services and a floor of administrative offices and support spaces. The facility will be linked to the Queensway-Carleton Hospital for access to support functions such as diagnostic imaging, lab and administrative support. The QCH Project will also include the construction of a multi – level, above grade parking garage.

In our role as Fairness Commissioner, P1-Consulting made certain that the following steps were taken to ensure a fair and open process:

- Compliance with the requisite procurement policies and procedures and the laws of tendering for the acquisition of services relating to public sector procurement;
- Adherence to confidentiality of bids, as applicable, and the evaluation process;

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Property One Consulting Inc.

- Objectivity and diligence during the procurement process in order to ensure that it was conducted in an open and transparent manner;
- Proper definition and use of evaluation procedures and assessment tools in order to ensure that the process was unbiased;
- Compliance of project participants with strict requirements of conflict of interest and confidentiality during the procurement and evaluation processes;
- Security of information;
- Prevention of any conflict of interest amongst evaluators on the selection committee;
- Oversight to provide a process where all Bidders were treated fairly.

The Fairness Commissioner actively participated in the following steps in the process to ensure that fairness was maintained throughout:

- Project kick-off meeting
- Review session of the Draft RFQ and RFP Documents
- Commercially Confidential Meetings with the pre-qualified Bidders by interested Bidders
- Site and facility visits by the Proponent
- Review of the RFQ and RFP Addenda
- Review of evaluation process and guideline
- Proposal receipt, bid evaluation and selection of the Negotiation Proponents
- Oversight of the Negotiation Process

The final step in the process was for the Sponsors to select the Preferred Proponent. The Evaluation Committee submitted a recommendation to proceed with PCL Construction.

As the Fairness Commissioner for the **Ottawa Hospital Regional Cancer Centre Project**, we certify that, to date, the principles of fairness, openness, consistency and transparency have, in our opinion, been maintained throughout procurement process. Furthermore, no issues emerged during the process, of which we were aware, that would impair the fairness of this initiative.

Yours truly,

Louise Panneton
Lead Fairness Commissioner

The Ottawa Hospital
Artist's rendering

Vermeulen/Hind Architects

Highlights of the Expansion of Services

	Current	New	Percent increase
Square footage of cancer centre	73,000	147,000	101
Radiation treatment machines	6	8	33
Number of clinics	2	4	100
Chemotherapy spaces	27	50	85

The Queensway Carleton Hospital
Artist's rendering

Vermeulen/Hind Architects

Highlights of the New Services

Square footage	87,000
Radiation treatment machines	3
Number of clinics	2
Chemotherapy spaces	33

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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.

An update to *ReNew Ontario* was released in July 2007 and is available at www.pir.gov.on.ca

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 Ottawa Hospital Regional Cancer Program project is one of the redevelopment projects to be delivered under the Province's Alternative Financing and Procurement model. This redevelopment project will include renovations to and expansion of the cancer centre at The Ottawa Hospital's General Campus and the addition of a new satellite cancer clinic at the Queensway Carleton Hospital. These two hospitals will provide cancer services for the entire region.

The goal of this integrated cancer program is to bring together programs in systemic therapy (chemotherapy), radiation therapy, surgical oncology, preventative oncology, palliative medicine and supportive care. The Ottawa Hospital Regional Cancer Program will serve a total population of 1.5 million in Ottawa and Eastern Ontario.

The Ottawa Hospital's redevelopment project includes the renovation and expansion of the existing cancer centre, an increased capacity for eight radiation treatment machines and additional space to offer a total capacity for four clinics and 50 chemotherapy spaces.

The Queensway Carleton Hospital's redevelopment project includes new construction of a four-storey building that will house three radiation treatment machines, two clinics and 33 chemotherapy spaces and construction of a new seven-storey parking structure.

The public sector retains ownership, control and accountability for both hospitals, including the new facilities.

The purpose of this report is to provide a summary of the project scope, the procurement process and the project agreements, and to demonstrate how value for money was achieved by delivering the Ottawa Hospital Regional Cancer Program project through the AFP process.

The value for money analysis refers to the process of developing and comparing the total project costs (expressed in dollars measured at the same point of time) of two delivery models.

Value for money is determined by directly comparing the cost estimates of the following:

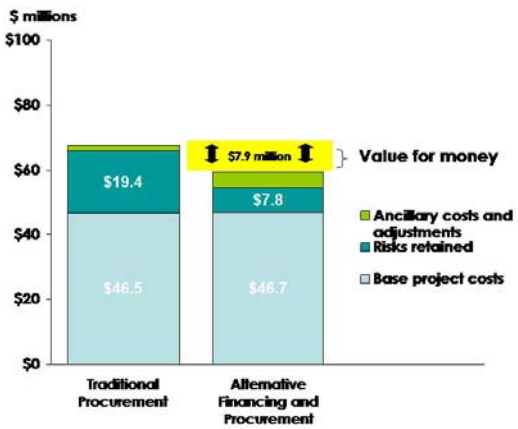
Model #1 **Traditional project delivery (Public sector comparator)**	**Model #2** **Alternative financing and procurement**
Total project costs that would have been incurred by the public sector to deliver an infrastructure project under traditional procurement processes.	Total project costs incurred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

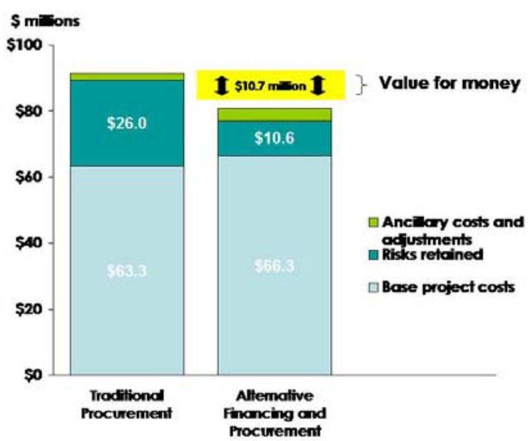
In this report, the costs for both The Ottawa Hospital and the Queensway Carleton Hospital will be analyzed, as both are part of The Ottawa Hospital Regional Cancer Program redevelopment project.

As such, a separate Value for Money analysis was conducted for The Ottawa Hospital and the Queensway Carleton Hospital projects.

The value for money assessment of The Ottawa Hospital project indicates estimated cost savings of 11.79 per cent or $7.9 million, by using the AFP approach in comparison to traditional delivery.



The value for money assessment of the Queensway Carleton Hospital project indicates estimated cost savings of 11.73 per cent or $10.7 million, by using the AFP approach in comparison to traditional delivery.



KPMG completed the value for money assessments of the projects at both hospitals. Their assessment of The Ottawa Hospital project demonstrates projected cost savings of 11.79 per cent by delivering it using the AFP model, versus what it would have cost to deliver the project using a traditional delivery model. For the Queensway Carleton Hospital project, KPMG's assessment demonstrates projected cost savings of 11.73 per cent by delivering the project using an AFP model, versus what it would have cost to deliver the project using a traditional delivery model.

Property One Consulting acted as the Fairness Monitor for both projects. They reviewed and monitored the communications, evaluations and decision-making processes associated with The Ottawa Hospital Regional Cancer Program project, ensuring the fairness, equity, objectivity, transparency and adequate documentation of the process. Property One Consulting certified that these principles were maintained throughout the procurement process.

Infrastructure Ontario will work with The Ottawa Hospital and Queensway Carleton Hospital on the redevelopment of both hospitals, 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. An update to *ReNew Ontario* was released in July 2007 and is available at www.pir.gov.on.ca.

Infrastructure Ontario is an essential component of the *ReNew Ontario* plan. The Crown Corporation was created in 2005, to ensure that new 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:

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

The Ottawa Hospital Regional Cancer Program

Founded in 1943, The Ottawa Hospital Regional Cancer Centre is an outpatient cancer treatment and research facility that reaches out to serve the needs of the Champlain Region. Currently, The Ottawa Hospital Regional Cancer Centre operates mainly from two campuses: The Ottawa Hospital's General Campus, located in Ottawa's east end, and at The Ottawa Hospital's Civic Campus, located in Ottawa's west end. In 2002 Cancer Care Ontario and The Ottawa Hospital conducted a review to ensure the hospital's regional cancer program would be positioned to meet future demands and address the shortage of space at the existing facilities. Because the Civic Campus presents a variety of significant facility development and expansion challenges, the decision was made to consolidate all cancer services of The Ottawa Hospital at the General Campus and introduce a satellite site at Queensway Carleton Hospital. These two hospitals will provide cancer services for the entire region.

The goal of this integrated cancer program is to bring together programs in systemic therapy (chemotherapy), radiation therapy, surgical oncology, preventative oncology, palliative medicine and supportive care.

The redeveloped Ottawa Hospital Regional Cancer Program will serve a total population of 1.5 million in Ottawa and Eastern Ontario.

The Government of Ontario approved redevelopment of the Ottawa Hospital Regional Cancer Program to be delivered under the AFP model in its 2005-2006 Capital Plan.

Job Creation

The redevelopment project will also create economic value as skilled tradespeople, subcontractors and their suppliers benefit from the capital investment. Over the construction period, there will be an estimated 180 workers on both sites daily.

Project Scope

The Ottawa Hospital Regional Cancer Program project involves renovations and expansions at both The Ottawa Hospital and the Queensway Carleton Hospital.

The Ottawa Hospital's redevelopment project will involve two distinct phases; an expansion of the existing cancer centre followed by renovations of the existing facility. This will provide increased capacity for eight radiation treatment machines and additional space for four clinics and 50 chemotherapy spaces.

The Queensway Carleton Hospital's redevelopment project includes construction of a new four-storey building that will house three radiation treatment machines, two clinics and 33 chemotherapy spaces and the construction of a new seven-storey parking structure.

Competitive selection process timeline

The Ottawa Hospital and Queensway Carleton Hospital have each entered into project agreements with a project company related to PCL Constructors Canada Ltd. (PCL) to complete the redevelopment projects. A single procurement process was used for both hospitals which resulted in a variety of benefits and cost savings. The procurement stages for the project were as follows:

November 3, 2006

Request for Qualifications

In 2006, the Ottawa Hospital, Queensway Carleton Hospital and Infrastructure Ontario issued a request for qualifications (RFQ) for the redevelopment project. Five proponents were qualified:

- EllisDon Corp.
- M. Sullivan & Son Ltd.
- PCL Constructors Inc.
- Pomerleau Inc.
- R.E. Hein Construction

May 25, 2007

Request for Proposals

A request for proposals (RFP) was issued to the qualified proponents, setting out the procurement process and proposed project agreements to build and finance the project.

Proposal submission

Proposals were submitted by the RFP proponents in September 2007 and evaluated by Infrastructure Ontario, The Ottawa Hospital and Queensway Carleton Hospital using the criteria set out in the RFP.

December 18, 2007

Preferred proponent notification

PCL was selected as the successful RFP proponent on the basis of their proposed price and project schedule, in accordance with the evaluation criteria set out in the RFP.

December 20, 2007

Commercial and financial close

Separate project agreements were executed by PCL with The Ottawa Hospital and Queensway Carleton Hospital.

Financing for PCL to complete the project was arranged by TD Bank.

January 2008

Construction

Construction began in January 2008 at both hospitals. During the construction period, the builder's construction costs will be funded through financing arranged by TD Bank in monthly instalments based on the construction program set out by PCL. Construction will be carried out in accordance with the project agreements. The project will be overseen by a Joint Building Committee made up of representatives from The Ottawa Hospital, Queensway Carleton Hospital, Cancer Care Ontario and Infrastructure Ontario.

Summer 2009

The completion of the new addition at The Ottawa Hospital and the seven-storey parking structure at Queensway Carleton Hospital are scheduled to be complete.

Fall 2009

Construction of the new satellite cancer clinic at the Queensway Carleton Hospital is scheduled to be complete.

Early 2011

Renovation of the existing facility is expected to be complete at The Ottawa Hospital.

Completion and payment

Completion and payment will be in two stages for each hospital.

The first payment for The Ottawa Hospital will be made upon completion of the new addition, which is expected in summer 2009. This interim portion of the project costs will be repaid by The Ottawa Hospital through funding from the Ministry of Health and Long-Term Care and the Hospital's fundraising efforts. It is anticipated that the project will reach substantial completion in early 2011, at which time the remaining amount of the project costs will be paid by The Ottawa Hospital through funding from the Ministry of Health and Long-Term Care and the Hospital's fundraising efforts.

The first payment for the Queensway Carleton Hospital will be made upon completion of the new parking structure, which is expected in summer 2009. This interim portion of the project costs will be paid by Queensway Carleton Hospital through the Hospital's parking revenues. It is anticipated that the project will reach substantial completion in fall 2009, at which time the remaining amount of the project costs will be paid by Queensway Carleton Hospital through funding from the Ministry of Health and Long-Term Care and the Hospital's fundraising efforts.

Hospital Capital Funding

The provincial government's hospital capital funding policy announced in June 2006, simplifies the Ministry of Health and Long-Term Care's funding formula. In the past, the Ministry's capital cost share rates varied from 50 per cent to 80 per cent, depending on the project. The new provincial government's portion of the construction costs now equals 90 per cent of eligible construction costs. Under this new policy, hospitals are responsible for 10 per cent of the eligible construction costs, otherwise known as their local share, as well as 100 per cent of the costs associated with the purchase of new and replacement equipment. Radiation treatment equipment is 100 per cent funded by the Ministry of Health and Long-Term Care.

Project agreements

Legal and Commercial Structure

The Ottawa Hospital and Queensway Carleton Hospital each entered into a project agreement with PCL to carry out the construction and financing of both projects. Under the terms of the project agreements, PCL will:

- build The Ottawa Hospital project, which will be completed in early 2011;
- build the Queensway Carleton project, which will be completed in fall 2009;
- provide a financing package for project construction; and
- ensure that, at the end of construction, both buildings meet the requirements specified in the project agreements.

The Ottawa Hospital and the Queensway Carleton Hospital will both remain publicly owned, publicly controlled and publicly accountable, including the new facilities constructed as a result of the project.

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 the private sector. These risks, such as design co-ordination and resource availability, could have led to cost overruns and delays in traditional projects. Other examples of risks transferred to the private sector under the AFP project agreement include:

Construction price certainty

PCL will construct the facilities at The Ottawa Hospital for a guaranteed maximum price of $46.7 million, including financing costs. They will construct the facilities at the Queensway Carleton Hospital for a guaranteed maximum price of $66.3 million, which includes financing costs. The builder's guaranteed maximum price for both hospitals may only be adjusted in very specific circumstances, agreed to in advance, in accordance with the change order procedures set out in the project agreements.

Scheduling, project completion and delays

At The Ottawa Hospital the builder has agreed to reach interim completion of the construction by summer 2009 and substantial completion by early 2011. At the Queensway Carleton Hospital the builder has agreed to reach interim completion of the construction by summer 2009 and substantial completion by fall 2009**.** The construction schedules can only be modified in very limited circumstances, in accordance with the project agreements. Payment for the hospitals will not commence until interim completion (i.e., until the interim work has been completed in accordance with the project agreements).

Costs associated with delays that are the responsibility of the builder must be paid by the builder.

Design co-ordination

The project agreements provide that PCL is responsible for all design coordination activities to ensure that the facilities are constructed in accordance with the design specification and to reduce the risks borne by the hospitals.

Costs associated with design coordination that are the responsibility of the builder must be paid by the builder.

Construction financing

PCL is required to finance the construction of each project until each facility reaches substantial completion and is turned over to the hospital. The project agreements provide that the builder will be responsible for all increases in financing costs that resulted from any builder delay in reaching substantial completion. This shifts significant financial risk to the builder for late delivery.

Schedule contingency

The project documents provide both hospitals with a 30-day schedule contingency, also known as a "schedule cushion," which shields both hospitals for up to 30 days of delay costs for which the hospitals are responsible. While delays caused by the hospitals are expected to be minimal, the schedule cushion provides the hospitals with some protection from the risk of delay claims by the builder.

Commissioning and facility readiness

PCL must achieve a prescribed level of commissioning of each new facility at substantial completion and must co-ordinate the commissioning activity within the agreed upon construction schedule. This ensures that each hospital will receive a functional building facility at the time payment is made.

Activity protocols

PCL and the consultants from The Ottawa Hospital and the Queensway Carleton Hospital are required to establish a schedule for project submittals by the builder. This takes into account the timing for issuance of supplemental instructions by The Ottawa Hospital and the Queensway Carleton Hospital's consultants. This protocol mitigates against the builder alleging delay as a result of an inability to receive supplemental instructions in a timely manner in the course of the work.

In addition to the above key risks being transferred to the builder under the project agreements, the financing arrangement entered into between PCL and the lending syndicate headed by TD Bank 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;
- the requirement that change orders must be within the project contingency or funded by The Ottawa Hospital or the Queensway Carleton Hospital; and
- the requirement that prior approval be secured for any changes made to the project budget in excess of a pre-determined threshold.

Change order protocol

In addition to the variation procedure set out in the project documents, Infrastructure Ontario's change order protocol with The Ottawa Hospital and the Queensway Carleton Hospital sets out the principles for any changes to the project work/scope during the construction period, including:

- requiring review and approval of change orders from The Ottawa Hospital or Queensway Carleton Hospital;
- specifying the limited criteria under which change orders will be processed and applied;
- timely notification of potential change orders to Infrastructure Ontario;
- timely review by Infrastructure Ontario for owner-initiated scope changes;
- approval by Infrastructure Ontario for any change orders that exceed pre-determined thresholds; and
- approval by Infrastructure Ontario when the cumulative impact of the change orders exceed a pre-determined threshold.

Achieving value for money

For The Ottawa Hospital, KPMG's value for money assessment demonstrates a projected cost savings of 11.79 per cent, or $7.9 million, by using the alternative financing and procurement (AFP) approach, as compared to the traditional procurement approach.

For the Queensway Carleton Hospital, KPMG's value for money assessment demonstrates a projected cost savings of 11.73 per cent, or $10.7 million, by using the alternative financing and procurement (AFP) approach, as compared to the traditional procurement approach.

KPMG 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. 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 result. Please refer to the VFM letters from KPMG on pages 2 and 4.

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 future 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.

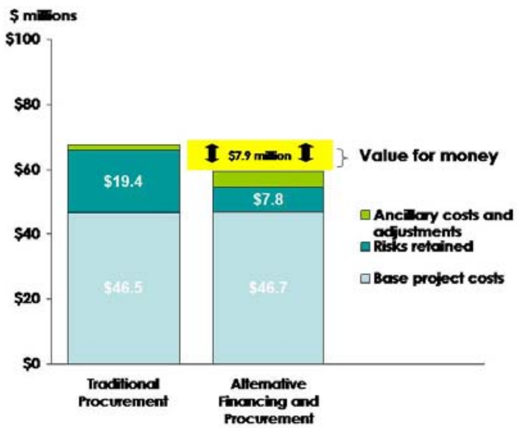
The cost difference between model #1 and model #2 is referred to as the value for money. If the total cost to deliver a project under the AFP approach (model #2) is less than the total cost to deliver a project under the traditional delivery approach (model #1), there is said to be positive value for 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 traditional delivery or AFP delivery and that are not part of the Project Agreement, such as land acquisition costs, furniture, fixtures and equipment, are excluded from this VFM calculation.

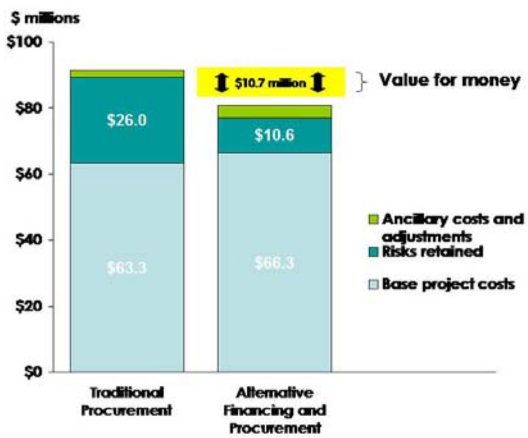
The value for money assessment is developed by obtaining detailed project information and input from multiple stakeholders, including internal and external experts in hospital project management and construction project management. In this report, costs for both The Ottawa Hospital and the Queensway Carleton Hospital will be analyzed, as both are part of The Ottawa Hospital Regional Cancer Program redevelopment project.

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

The value for money assessment of The Ottawa Hospital project indicates estimated cost savings of 11.79 per cent or $7.9 million, by using the AFP approach in comparison to traditional delivery.



The value for money assessment of the Queensway Carleton Hospital project indicates estimated cost savings of 11.73 per cent or $10.7 million, by using the AFP approach in comparison to traditional delivery.



A separate value for money assessment was conducted for each hospital project. The two projects were combined into a single procurement process in an effort to further enhance value for money. Procuring both projects at the same time saved the public sector money through a reduction in tendering costs and external advisory fees. Procuring both projects at the same time also reduced costs for the private sector that would have been built into their pricing for the project, such as legal fees and bid costs.

While the single procurement process resulted in real cost savings that are included in the value for money assessment, 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, however, of having a project delivered on time cannot always be accurately quantified. It would be difficult to put a dollar value on the people of Ontario gaining access to an expanded health care facility sooner than would be the case with a traditionally-financed project.

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 and AFP costs are future-valued to substantial completion to compare the two methods of delivering a Build Finance 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 future-valued and 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.

Base costs

Base project costs are taken from the price of the contracts signed with PCL, and include all construction and financing costs. Typically, 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 has transferred 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 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 Ottawa Hospital, these were $46.7 million. For Queensway Carleton Hospital, these were $66.3 million.

If the traditional model had been used for this project, base costs for The Ottawa Hospital are estimated to have been $46.5 million, and base costs for Queensway Carleton Hospital are estimated to have been $63.3 million.

Risks retained

The public sector has always had to bear costs that go beyond a project's base costs. Total project costs exceed base costs in large part due to contingencies for the project risks.

Project risks may be 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 ensure that the party best able to manage, mitigate and/or eliminate the project risks, is allocated those risks under the project documents (see page 16).

Under the traditional delivery method, the risks retained by the public sector would be significant. As discussed on pages 16-17, the following are examples of risks retained by the public sector under the traditional delivery method. These risks have been transferred to the builder under the project agreement using the AFP model:

- construction price certainty;
- scheduling, project completion and potential delays ;
- design co-ordination;
- construction financing;
- schedule contingency;
- 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 facilities are constructed in full accordance with the design in the project agreement. The builder is responsible for: inconsistencies, conflicts, interferences or gaps in the contract documents and particularly in the plans, drawings and specifications; and design completion issues, which are specified in the contract documents but erroneously left out in the drawings and specifications.

- *Scheduling, project completion and delays:* Under the AFP approach, the builder has agreed that it will provide the facility for use by the public sector by a fixed date and at a pre-determined price to the public sector. 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 public sector, thus providing 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.

AFP reduces these risks to the public sector. Under a traditional approach, design coordination risks that materialize 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 the private sector builder.

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 assumes 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 facilities such as hospitals and courthouses.

It is this generic risk matrix that has been used for validating the risk allocation for the specific conditions of the Ottawa Hospital and the Queensway Carleton Hospital projects.

A detailed risk analysis of The Ottawa Hospital project concluded that the average value of project risks retained by the public sector under traditional delivery is $19.4 million. The analysis also concluded that the average value of project risks retained by the public sector under the AFP delivery model decreases to $7.8 million.

A detailed risk analysis of the Queensway Carleton Hospital project concluded that the average value of project risks retained by the public sector under traditional delivery is $26 million. The analysis also concluded that the average value of project risks retained by the public sector under the AFP delivery model decreases to $10.6 million.

For more information on the risk assessment methodology used by Infrastructure Ontario, please refer to Altus Helyar's *Build-Finance Risk Analysis and Risk Matrix*, available at www.infrastructureontario.ca.

Ancillary costs and adjustments

There are significant ancillary costs associated with the planning and delivery of a large complex project that could 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 built according to 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 Ottawa Hospital project, under the traditional delivery method are estimated to be $1.5 million as compared to $2.8 million under the AFP approach.

The ancillary costs for the Queensway Carleton Hospital project, under the traditional delivery method are estimated to be $2.3 million as compared to $3.8 million under the AFP approach.

For The Ottawa Hospital project a further adjustment of $2.1 million has been made under the AFP model to reflect additional notional public financing costs resulting from the interim payment, scheduled in summer 2009, to the builder, covering the period between completion of the new addition, expected in summer 2009, and the project substantial completion, expected in early 2011.

For the Queensway Carleton Hospital project a further adjustment of $0.1 million has been made under the AFP model to reflect additional notional public financing costs resulting from the interim payment at completion of the new parking structure, scheduled in summer 2009, to the builder, covering the period between completion of the new parking structure and the project substantial completion, expected in early fall 2009.

It is important to note that the interim payments at completion of the new addition at The Ottawa Hospital and at the completion of the new parking structure at the Queensway Carleton Hospital will only be made at the successful completion of these clearly defined phases of each project, which will include occupancy of the new facility in The Ottawa Hospital's case; as well, the project risk allocation is not materially affected.

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

Calculating value for money

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

Once all the cost components and adjustments are determined, then the aggregate costs associated with each delivery model (i.e., traditional delivery and AFP) are calculated, and expressed in Canadian dollars, as at substantial completion date.

In the case of The Ottawa Hospital project, the estimated traditional delivery cost (i.e. PSC) is $67.3 million as compared to $59.4 million under the AFP delivery approach.

The positive difference of $7.9 million or 11.79 per cent between the above delivery costs represents the estimated value for money by using the AFP delivery approach in comparison to the traditional delivery model.

In the case of the Queensway Carleton Hospital project, the estimated traditional delivery cost (i.e. PSC) is $91.5 million as compared to $80.8 million under the AFP delivery approach.

The positive difference of $10.7 million or 11.73 per cent between the above delivery costs represents the estimated value for money by using the AFP delivery approach in comparison to the traditional delivery model.