



**Value for Money Assessment** 

**Humber River Regional Hospital** 



November 3, 2011

Infrastructure Ontario 777 Bay Street Toronto, Ontario M5G 2C8

Attn: Mr. Jim Cahill

#### Re: Financial Close Stage Value for Money Assessment - Humber River Regional Hospital Project

Dear Mr. Cahill:

PricewaterhouseCoopers LLP ("PwC") has prepared the Value for Money ("VFM") assessment for the Humber River Regional Hospital Project ("HRRH", or "the 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
- 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
- Cost and other input assumptions extracted from the bid submitted by the Successful Bidder and other VFM model assumptions as provided by IO.

PricewaterhouseCoopers LLP

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"Pwc" refers to Pricewaterhouse Coopers LLP, an Ontario limited liability partnership, which is a member firm of Pricewaterhouse Coopers International Limited, each member firm of which is a separate legal entity.



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 19.1% in comparison to the traditional delivery approach.

Yours very truly

PricewaterhouseCoopers LLP

channe Museum

Johanne Mullen Partner



# PRP International, Inc.

# Fairness Monitor Services

October 21, 2011

Mr. Derrick Toigo Vice President, Project Delivery Infrastructure Ontario 777 Bay Street, 6th Floor Toronto, ON M5G 2C8

Dear Mr. Toigo:

Subject: Attestation of the Fairness Monitor

Humber River Regional Hospital (HRRH) Project

PRP International, Inc. was retained to provide Fairness Monitor services for the above noted project. The Request for Proposals (RFP) phase commenced on October 25, 2010 and the deadline for RFP Submissions was May 26, 2011.

During the course of this phase, the specified processes were appropriately and equitably applied to all Proponents and the three RFP Submissions received prior to the submission deadline were considered in accordance with the processes and criteria set out in the RFP.

Accordingly, "It is the judgment of PRP International, Inc., as the Fairness Monitor, that the ranking of the three Proponents in the following order:

- Plenary Health Care Partnerships;
- 2. Future Health; and
- 3. Hospital Infrastructure Partners, Inc.,

was made in a fair (objective, consistent and competent) manner and consistent with the RFP evaluation processes and criteria set out in the HRRH Request for Proposal, issued October 25, 2010, as amended."

A Backgrounder is attached.

Yours truly,

PRP International, Inc.

Peter Sorensen President

cc: Ms. Nicki Bregolin, Manager, Procurement

203 - 8 QUEEN STREET, SUMMERSIDE, PEI C1N 0A6 TELEPHONE: 902.436.3930 FAX: 604-677-5409 EMAIL: fairness@telus.net

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## FACT SHEET TO FAIRNESS ATTESTATION Humber River Regional Hospital RFP Procurement

October 2011

#### TO WHOM IT MAY CONCERN:

#### Background:

- A Request for Proposal procurement transaction was conducted by Infrastructure Ontario (IO) and its client Humber River Regional Hospital (HRRH) (collectively, the Sponsors), for a new hospital complex, during the period October, 2010 to September 2011;
- The evaluation and selection phase of the RFP provided for the evaluation of written submissions to determine a Preferred Proponent; and
- PRP International, Inc. was engaged, following an IO competitive procurement, to act as the Farmess Montor for the Request for Qualifications and Request for Proposal phases.

#### Summary Fairness Observations - RFP Evaluation:

#### Preamble:

 A Pairtness Framework guided the fairness monitoring of this procurement; some notable protocols are.

Fairness Monitor (Fanness) does not evaluate or read Proposals; Fairness does not participate in the design of the RFP or Evaluation Francework —but must understand and be able to monitor and attest to the performance of the evaluation teams against the rules and processes established by IO; i.e. adherence to the evaluation and selection rules set out in the RFP and Evaluation Francework; Requirement for disclosure of individual evaluator scores prior to consensus discussion and scoring;

Evaluations are conducted on a Proponent basis against the stated evaluation criteria and not by comparison to other Proponents (except when NPV scoring is required in the Financial Evaluation Team).

#### Observations:

 Performance of the evaluation and selection processes was in accordance with the Evaluation Framework

> Three (3) Pre-Qualified Proponents were eligible and submitted Proposals prior to the Submission Deadline;

Evaluators included persons in the Design and Technical Evaluation Teams (DET and TET, respectively) that had not been involved during the RFP Open Period, e.g. the Design Consultation's Commercially Confidential Meetings process:

Competency of evaduators was evident:

Effective discussions were had in securing consensus;

PRP International, Inc.

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Infrastructure Ontario & Humber River Regional Hospital

## FACT SHEET TO FAIRNESS ATTESTATION Humber River Regional Hospital RFP Procurement

October 2011

Effective engagement of Fairness in advance review of Request for Clarifications, notably, with respect to the Financial Evaluation Team's (FET) RFCs;

Evaluation Teams did arrive at their consensus scores on a Proponent basis; however, for the purposes of reporting out the consensus scores to the Evaluation Committee, the reporting was done by evaluation criteria resulting in the appearance of comparative consensus scores across Proponents – the presentation format was not inappropriate and was quite effective; and The appropriate due diligence was undertaken in response to unselicited Proponent representations on certain Evaluation Criteria, during the Evaluation Phase.

#### Fairness Attestation:

An Attestation as to the fair evaluation and selection of the selected Preferred Proponent, Plenary Bealth Care Partnerships (PBCP) is attached.

#### Fairness Monitor Team:

The following individuals served on the PRP International, Inc. Farmess team:

- Peter Sorensen, Principal Fairness Monitor.
- Sandro Benedetti, Associate Fairness Mointon

PRP International, Inc. 2 of 2

Infrastructure Ontario & Humber River Regional Hospital

# Artist's rendering of Humber River Regional Hospital



Courtesy of HDR Architects/C.F. Møller Architects

# Highlights of the new Humber River Regional Hospital:

Size	Approximately 1.8 million square feet
Number of beds	Capacity for 656 patients
Patient benefits	<ul> <li>A state-of-the-art facility with a full range of health services including:</li> <li>expanded emergency services to handle more than 97,000 visits</li> <li>expanded ambulatory care services including more capacity for cancer care, orthopaedics and geriatrics</li> <li>80% single patient rooms with alcoves for family accommodations</li> <li>modern diagnostics equipment for faster, more accurate diagnosis</li> <li>Lean, Green and Digital</li> </ul>
Environmentally Sustainable	Leadership in Energy and Environmental Design (LEED®) Silver certification.
Design	Highlights include:
	<ul> <li>building materials with recycled content and a 75 per cent diversion rate for construction waste from the landfill</li> <li>reducing indoor water use by 35 per cent using highly efficient plumbing fixtures including low-flush toilets, faucets and showers</li> <li>minimizing solar heat gain by installing reflective roofing (50 per cent of the building will feature a green roof)</li> <li>enhanced occupant health by use of low-emitting materials for adhesives and sealants; paints and coatings and carpets</li> <li>design elements that respond to climate conditions including: prevailing winds, site orientation, seasonal sun paths and precipitation, surface water drainage and solar gain</li> <li>sustainable landscape elements, such as pastoral gardens, patios and a piazza, featuring native and drought-resistant plants</li> </ul>

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# **Summary**

Humber River Regional Hospital's new hospital supports the Province of Ontario's long-term infrastructure plan to repair, rebuild and renew the province's roads and highways, bridges, public transit, schools and post-secondary institutions, hospitals and courthouses in communities across Ontario.

Over the last six years, the Province has averaged \$10 billion in infrastructure investments per year. In June 2011, the Province launched its new long-term infrastructure plan – *Building Together*. The Province expects to continue significant investments in public infrastructure, and will begin by investing more than \$35 billion over the next three years.

Infrastructure Ontario plays a key role in procuring and delivering infrastructure projects, on behalf of the Province. When Infrastructure Ontario was created, its mandate included using an alternative financing and procurement (AFP) method to deliver large, complex infrastructure projects. In June 2011, the Province expanded Infrastructure Ontario's role to deliver projects of various sizes, including ones suitable for an AFP delivery model, as well as other delivery models.

The new Humber River Regional Hospital is being delivered under the Province's AFP model.

The new, 1.8 million square-foot hospital will provide more beds, programs and services. Features and enhancements of the new hospital will be state-of-the-art and will improve the experience of patients, staff, family and friends.

Humber River Regional Hospital has three main objectives for the project: **Lean, Green** and **Digital**.

**Lean** - based on the philosophy of form follows function, the hospital will enhance clinical workflow with technologies promoting efficient use of staff and resources. This allows for the smooth flow of patients, staff and visitors while reducing waiting times and travel distances.

Green - The design and construction of the new hospital will adhere to the guidelines and sustainability principles of the Leadership in Energy and Environmental Design (LEED®) rating system, with a goal of achieving LEED® Silver. LEED® buildings focus on healthy indoor environments, reduced greenhouse gas emissions and efficient use of energy, water and other resources.

**Digital** - The objective of a digital hospital is to use the current technologies to enhance all aspects of quality care delivery. It leverages technology to improve efficiency, accuracy, reliability and safety. It also allows for easier information flow and access to care providers, patients and community partners.

The public sector retains ownership, control and accountability for Humber River Regional Hospital.

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 Humber River Regional Hospital 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.

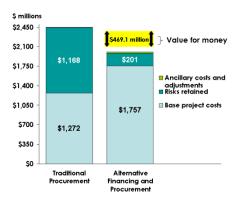
Value for money is determined by directly comparing the cost estimates for the following two delivery models:

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

# making <sub>projects</sub> happen

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 Humber River Regional Hospital project indicates estimated cost savings of 19.1 per cent or \$469 million, by using the AFP approach in comparison to traditional delivery.



PricewaterhouseCoopers completed the value for money assessment of the Humber River Regional Hospital project. Their assessment demonstrates projected cost savings of 19.1 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.

PRP International, Inc. acted as the Fairness Monitor for the project. They reviewed and monitored the communications, evaluations and decision-making processes associated with the Humber River Regional Hospital project, ensuring the fairness, equity, objectivity, transparency and adequate documentation of the process. PRP International, Inc. certified that these principles were maintained throughout the procurement process (please see letter on page 4).

Infrastructure Ontario is working with Humber River Regional Hospital to develop the new facility, which will remain publicly owned, publicly controlled and publicly accountable.

# **Project description**

## Background

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;
- appropriate public control and ownership must be preserved;
- 4. accountability must be maintained; and
- all processes must be fair, transparent and efficient.

#### **Project Scope**

Humber River Regional Hospital is one of Ontario's largest regional acute care hospitals, serving more than 850,000 residents in the northwest Greater Toronto Area, one of Canada's fastest growing and most ethnically diverse communities.

The new, 1.8 million square-foot hospital will provide more beds, programs and services. Features and enhancements of the new hospital will be state-of-the-art and will improve the experience of patients, staff, family and friends.

The hospital will be built to the highest Ministry of Health and Long-Term Care standards for patient care and patient safety while being fully accessible.

Project Highlights Include:

- increased capacity on opening from 549 to 656 beds, including 48 critical care beds to meet the needs of the growing surrounding community;
- expanded emergency services to accommodate more than 107,000 visits per year, complemented by an urgent care centre at the Finch Street site that will provide care to another 30,000 visits per year;
- expanded ambulatory services, including more capacity for cancer care, orthopedics and geriatrics;

- patient-centered care with 80 per cent single patient rooms providing amenities for family members and helping prevent the spread of infections:
- modern diagnostics equipment for detailed, accurate patient diagnosis and treatment; and
- portals of care for easy access and less walking within the building

Humber River Regional Hospital had three main objectives for the project:

**Lean** – based on the philosophy of form follows function, the hospital will enhance clinical workflow with technologies promoting efficient use of staff and resources. This allows for the smooth movement of patients, staff and visitors while reducing waiting times and travel distances.

Green - The design and construction of the new hospital will adhere to the guidelines and sustainability principles of the Leadership in Energy and Environmental Design (LEED®) rating system, with a goal of achieving LEED® Silver. LEED® buildings focus on healthy indoor environments, reduced greenhouse gas emissions and efficient use of energy, water and other resources.

**Digital** - The objective of a digital hospital is to use the current technologies to enhance all aspects of quality care delivery. It leverages technology to improve efficiency, accuracy, reliability and safety. It also allows for easier information flow and access to care providers, patients and community partners.

#### Job Creation

The project will help provide economic stimulus by creating and supporting hundreds of jobs. Labour will largely be drawn from the Greater Toronto Area. At the peak of construction, it is estimated that 1,200 workers will be on site daily.

# Competitive selection process timeline

Humber River Regional Hospital has entered into a project agreement with Plenary Health Care Partnerships to design, build, finance and maintain the Humber River Regional Hospital. The procurement stages for the project were as follows:

# May 27, 2010

Request for Qualifications

In 2010, Infrastructure Ontario and Humber River Regional Hospital issued a request for qualifications for the project. Three building teams were prequalified:

#### **Future Health Consortium**

- Bilfinger Berger Project Investments
- SNC Lavalin Capital
- Walsh Construction Canada
- SNC Lavalin Construction Ontario
- Bondfield Construction
- Honeywell
- SNC Lavalin Operations and Maintenance
- Cannon Design

# Plenary Health Care Partnerships

- Plenary Group/HCP Canada
- PCL Constructors Canada
- HDR Inc.
- C.F. Møller Architects
- Johnson Controls
- Hewlett-Packard
- Plan Group
- Modern Niagara
- Smith+Andersen
- Halsall Associates
- RBC Capital Markets

#### **Hospital Infrastructure Partnerships**

- Fengate Capital Management Ltd.
- Carillion Canada Inc.
- EllisDon Corporation
- Stantec Architecture Ltd.
- Scotia Capital
- H. H. Angus & Associates Ltd.
- Crossey Engineering Ltd.
- Stephenson Engineering Ltd.
- Read Jones Christofferson
- Geo. A. Kelson Company Ltd. and Univex Group of Companies.

#### October 26, 2010

Request for Proposals

A request for proposals (RFP) was issued to the prequalified 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 27, 2011. Three bids were received. The bids were evaluated using the criteria set out in the RFP.

#### Preferred proponent notification

Plenary Health Care Partnerships Inc. was selected as the successful RFP proponent based on predetermined criteria, including technical requirements such as project management and construction plan, works schedule, equipment procurement and coordination plan, transition and commissioning plan. Their selection was also based on operation plan, design requirements such as clinical functionality, general functionality, design quality and technical quality, as well as price and financial backing, in accordance with the evaluation criteria set out in the RFP.

The Plenary Health Care Partnerships team includes:

- Plenary Group/HCP Canada
- PCL Constructors Canada
- HDR Inc.
- C.F. Møller Architects
- Johnson Controls
- Hewlett-Packard
- Plan Group
- Modern Niagara
- Smith+Andersen
- Halsall Associates
- RBC Capital Markets

# September 26, 2011

Commercial and Financial Close

A project agreement between Plenary Health Care Partnerships and Humber River Regional Hospital was announced.

# December 2011 - spring 2015

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 PCL Constructors Canada.

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 Infrastructure Ontario and Humber River Regional Hospital.

# Completion and payment

Plenary Health Care Partnerships will receive a payment from the Province when the project reaches substantial completion, which is expected in summer 2015. This payment will be followed by monthly service payments over a 30-year period for construction of the facility, building maintenance, lifecycle repair and renewal and project financing.

#### Summer 2015- fall 2045

Maintenance

Plenary Health Care Partnerships will maintain the Humber River Regional Hospital for 30 years and be responsible for building maintenance, repair and lifecycle replacement during that period.

# Project agreement

#### Legal and commercial structure

The Province entered into a project agreement with Plenary Health Care Partnerships, comprising approximately 44 months of construction and a 30-year maintenance timeframe. Under the terms of the project agreement, Plenary Health Care Partnerships will:

- design and build the hospital;
- finance the construction and capital costs of the new hospital over the term of the project;
- obtain a third-party independent certification that the hospital is built;
- provide facility management and lifecycle maintenance for the 30-year service period under pre-established maintenance performance standards 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 Health Care Partnerships, based on performance requirements defined in the project agreement. The Province will not commence these payments until the new hospital is substantially completed. Moreover, if Plenary Health Care Partnerships does not meet the standards set in the agreement, it will face financial deductions.

The province will make a substantial completion payment of \$611.5 million for the new hospital once built. Plenary Health Care Partnerships will be paid an average of \$53.9 million each year for a 30-year period for the construction of the facility, building maintenance, lifecycle repair and renewal, as well as project financing.

Humber River Regional Hospital will be publicly owned and publicly controlled. The hospital 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 building and maintenance team will be granted a licence to access the site in order to provide the construction and facility maintenance services over the term of the agreement. However, as noted above, the new facility will at all times remain publicly owned and the building and maintenance team are contractually bound to follow the terms of the project agreement.

#### Facility management and maintenance

## **Facility management**

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

#### Lifecycle maintenance

Lifecycle maintenance represents the total cost of replacing, refurbishing and refreshing building structure and systems over their useful life. With respect to this project, "lifecycle 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. Lifecycle 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 Health Care Partnerships. On a traditional project, these risks and resource availability 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 Health Care Partnerships will finance and construct the new facility. Plenary Health Care Partnerships will receive a payment from the government at substantial completion, which is expected in summer 2015. This payment will be followed by monthly service payments over a 30-year period for construction of the facility, building maintenance, lifecycle repair and renewal and project financing.

Plenary Health Care Partnerships' 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 documents.

#### Scheduling, project completion and delays

Plenary Health Care Partnerships has agreed to reach substantial completion of the hospital by summer 2015.

The construction schedule can only be modified in very limited circumstances, in accordance with the project agreement. Plenary Health Care Partnerships' final payment will not commence until substantial completion (i.e., until it has completed building the new hospital and it has been certified as complete by an independent consultant).

Costs associated with delays that are the responsibility of PCL Constructors Canada must be paid by Plenary Health Care Partnerships.

#### Site conditions and contamination

Plenary Health Care Partnerships accepted the site and the site conditions and shall not be entitled to make claims against the Province on any grounds relating to the site. Furthermore, Plenary Health Care Partnerships is responsible for remediation of any contamination at the site that was disclosed in or could have been reasonably anticipated from the environmental report or any of the geotechnical reports, or that is caused by Plenary Health Care Partnerships or any of its parties.

#### **Development approvals**

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

Mechanical and electrical systems responsibility

Plenary Health Care Partnerships shall be responsible for:

- any issues with respect to the functionality, durability, maintainability and lifecycle 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 Health Care Partnerships is required to finance the construction of the project until the hospital is substantially complete. Plenary Health Care Partnerships will be responsible for all increased financing costs should there be any delay in them reaching substantial completion. This

shifts significant financial risk to Plenary Health Care Partnerships in the case of late delivery.

#### Commissioning and facility readiness

Plenary Health Care Partnerships must achieve a prescribed level of commissioning of the new hospital at substantial completion and must coordinate the commissioning activity within the agreed-upon construction schedule. This ensures Humber River Regional Hospital will receive a functional building facility at the time payments to Plenary Health Care Partnerships commence. Plenary Health Care Partnerships will work closely with Humber River Regional Hospital to facilitate transition from other facilities.

#### Activity protocols

Plenary Health Care Partnerships and Infrastructure Ontario have established a schedule for project submittals taking into account the time for review needed by Infrastructure Ontario's compliance architect.

This protocol mitigates against Plenary Health Care Partnerships 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 and Humber River Regional Hospital;
- specifying the limited criteria under which change orders will be processed and applied;
- timely notification of change orders to Infrastructure Ontario;
- approval by Infrastructure Ontario for ownerinitiated scope changes; and
- approval by Infrastructure Ontario for any change order.

#### Facilities maintenance risk

As part of the project agreement, key risks associated with the maintenance responsibility (including life-cycle renewal) of the hospital over the 30-year service period have been transferred to Plenary Health Care Partnerships. Plenary Health Care Partnerships' maintenance of the building's lifecycle repair and renewal must meet the performance requirements set out in the project agreement. Under the project agreement, Plenary Health Care Partnerships 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 Health Care Partnerships under the project documents, the financing arrangement entered into between Plenary Health Care Partnerships 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 Humber River Regional Hospital project, PricewaterhouseCoopers' value for money assessment demonstrates a projected cost savings of 19.1 per cent, or \$469 million, by using the alternative financing and procurement approach, as compared to the traditional procurement approach.

PricewaterhouseCoopers 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. 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 Please refer to the letter from assessment. PricewaterhouseCoopers on page 2.

# 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.

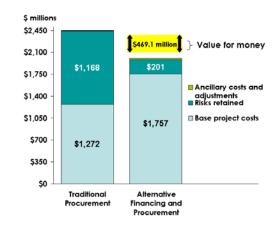
Model #1 Traditional project delivery (Public sector comparator)	Model #2 Alternative Financing and Procurement	
Total project costs that	Total project costs incurred	
would have been incurred	by the public sector to	
by the public sector to	deliver the same	
deliver an infrastructure	infrastructure project with	
project under traditional	identical specifications	
procurement processes.	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 VFM assessment of the Humber River Regional Hospital project indicates estimated cost savings of 19.1 per cent or \$469 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.

# Base costs

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

- 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 hospital project, these were \$1.76 billion.

If the traditional model had been used for the hospital project, base costs are estimated to be \$1.27 billion.

#### Risks retained

Historically, on traditional projects, the public sector had to bear costs that go beyond a project's base costs.

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 are keys 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 detailed 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 to 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 14-15, 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 Health Care Partnerships:

- 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 lifecycle 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 Humber River Regional Hospital 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 hospital project.

Using the AFP model reduces these risks 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 Health Care Partnerships .

A detailed risk analysis of the project concluded that the average value of project risks retained by the public sector under traditional delivery is \$1.17 billion. The analysis also concluded that the average value of project risks retained by the public sector under the AFP delivery model decreases to \$201 million.

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.

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 project under the traditional delivery method are estimated to be \$8.2 million as compared to \$24.1 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 this project, this adjustment is made by adding \$42.4 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

Calculating value for money

The analysis completed by PricewaterhouseCoopers 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 Humber River Regional Hospital project, the estimated traditional delivery cost (i.e. PSC) is \$2.45 billion as compared to \$1.98 billion under the AFP delivery approach.

The positive difference of \$469 million or 19.1 per cent represents the estimated value for money by using the AFP delivery approach in comparison to the traditional delivery model.