



making projects
happen

Value for Money Assessment

St. Joseph's Healthcare Hamilton
West 5th Campus



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

Re: Final Value for Money Assessment – SJHH Centre for Mountain Health Services

Dear Mr. Cahill:

KPMG LLP (“KPMG”) has prepared the Value for Money (“VFM”) assessment for the St. Joseph’s Healthcare Hamilton Centre for Mountain Health Services 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 14.24% 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
January 31, 2011

KPMG LLP, a Canadian limited liability partnership, is the Canadian member firm of KPMG International, a Swiss cooperative.



Knowles
A Hill International Company

August 31, 2010

Mr. David Ho, Counsel, Project Legal
Infrastructure Ontario
777 Bay St., 6th Floor
Toronto, ON M5G 2C8

Dear Mr. Ho,

**Re: Infrastructure Ontario (IO) OIPC-07-00-M045
Fairness Monitor Services for St. Joseph's Healthcare Hamilton
RFP No. OIPC-09-33-1006**

Knowles Consultancy Services Inc. (**Knowles**) was retained by Infrastructure Ontario (**IO**) and its Co-Sponsor, St. Joseph's Healthcare Hamilton in March 2009 to provide Fairness Monitoring Services for the development of the St. Joseph's Healthcare Hamilton (**SJHH**).

Our role was to review the Co-Sponsors procurement process, attend various meetings defined by the Co-Sponsors, attend the consensus evaluation meetings, attend the Evaluation Committee meeting and produce this letter report on the procurement process.

By way of background only, parties that were pre-qualified, through the Co-Sponsor's Request for Qualification (RFQ) process were eligible to participate in the Request for Proposal (RFP) stage, i.e., OIPC-09-33-1006.

Three organizations were pre-qualified from the RFQ process to proceed as Proponents for the RFP stage, i.e.

- Carillion Health Solutions
- Integrated Team Solutions
- Plenary Health

Our role as Fairness Monitor was to review IO's procurement process from the release of the RFP to the selection of the Preferred Proponent or Negotiations Proponents. This was done to ensure that the processes used were in accordance with the provisions of the RFP document. This monitoring was strictly limited to:

KNOWLES CONSULTANCY SERVICES INC.

1599 Hurontario Street, Suite 106, Mississauga, Ontario L5G 4S1

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To: Mr. David Ho, Counsel, Project Legal
Re: Infrastructure Ontario OIPC-09-33-1006

September 2, 2010
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- Application of the evaluation criteria;
- Consistency of Proponent treatment;
- Adherence of IO and SJHH staff and external advisors to conflict of interest and confidentiality requirements;
- Communications and information to Proponents and Proponent meeting, all as directed by the Co-Sponsors.
- Security of proposals and evaluation documents;
- Qualifications of the evaluation team;
- Objectivity and diligence respecting the evaluation process;

The role of Fairness Monitor, as the title implies, focused strictly on a monitoring of practices to ensure consistency with the stipulations of the procurement document (RFP). This involved taking the stipulations of the RFP as a standard against which to audit the process.

The report is based on our first hand observations of the process used, a review of the procurement documents and information provided by the procurement project team. It was prepared for the project counsel of Infrastructure Ontario. Any other person who wishes to review this report must first obtain the written permission of Infrastructure Ontario, prior to its publication. Knowles or the individual author of this report bears no liability whatsoever for opinions that unauthorized persons may infer from this report.

As Fairness Monitor we can attest to the fact that:

- The evaluation process was consistent with that outlined in the RFP;
- The evaluation criteria and process used was applied in accordance with the stipulations of the RFP document and the Co-Sponsors Evaluation Framework document;
- All bidders were treated consistently and in accordance with the stipulations of the RFP;
- IO, SJHH staff and external advisors adhered to conflict of interest and confidentiality requirement.

Proposals were received from the three pre-qualified Proponents for this competition.

All three Proponents passed threshold scores and were considered for the financing portion of the evaluation.

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As a result of the evaluation process, a Negotiation(s) Proponent(s) was selected based on the highest total score(s).

Yours truly,

Knowles Consultancy Services Inc.

A handwritten signature in blue ink, appearing to read "R. Bridges", with a long horizontal flourish extending to the right.

**Roger Bridges, MBA, P.Eng, FCI Arb.
Fairness Monitor**

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Artist's Rendering of the new West 5th Campus



CIVIC CORNER
Civic's Architecture | June 30, 2018



Courtesy of Plenary Health

Highlights of the new St. Joseph's Healthcare Hamilton, West 5th Campus:

Square Footage	<ul style="list-style-type: none"> Approximately 800,000
Patient capacity	<ul style="list-style-type: none"> 305 inpatient beds
Room features	<ul style="list-style-type: none"> All single patient rooms A washroom in each patient room for enhanced infection prevention and control; Larger patient rooms with modern technologies; and More natural light.
Environmentally Sustainable Design	<p>Targeting Leadership in Energy and Environmental Design (LEED®) Silver certification, highlights include:</p> <ul style="list-style-type: none"> Building materials with recycled and locally sourced products and divert 90 per cent of construction waste from the landfill; New landscaping with native, drought resistant species; Reducing the facility's indoor water use by over 20 per cent through the use of highly efficient plumbing fixtures including low-flush toilets, faucets and showers; Space for secure bicycle storage, shower facilities for staff and public transportation routes in close proximity to the facility's front entrance; Minimal solar heat gain through a predominant east-west orientation and a PVC roof to reduce the heat island effect; and Limiting the amount of light pollution by designing the site lighting layout with no light spillage to adjacent properties.

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Summary

ReNew Ontario 2005-2010 was 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.

St. Joseph's Healthcare Hamilton, West 5th Campus redevelopment project is being delivered under the Province's Alternative Financing and Procurement (AFP) model.

The new hospital, located in Hamilton, Ontario, will provide more inpatient beds and more services. It will have expanded outpatient clinics for psychiatry, diagnostic imaging and medical services, along with research and academic spaces in order to better support people and families struggling with mental illness and addiction.

The new facility will be designed to support patient and family-centred care and the McMaster University Department of Psychiatry will be relocated to the St. Joseph's West 5th Campus.

This new, state-of-the-art hospital will replace the current mental health hospital located on the West 5th Campus grounds.

St. Joseph's Healthcare Hamilton West 5th Campus redevelopment project will target Leadership in Energy and Environmental Design (LEED®) Silver certification. LEED buildings focus on healthy indoor environments, reduced greenhouse gas emissions and efficient use of energy, water and other resources.

The public sector retains ownership, control and accountability for the 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 St.

Joseph's Healthcare Hamilton, West 5th Campus redevelopment project through the AFP process.

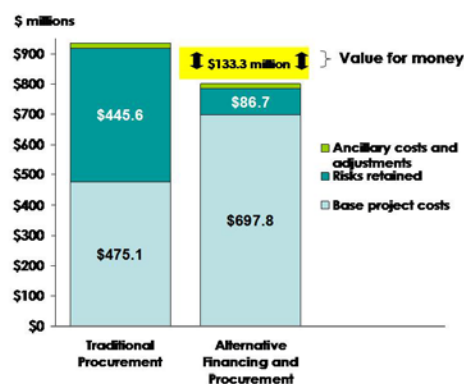
The value for money analysis refers to the process of developing and comparing the total project costs under two different delivery models expressed in dollar values measured at the same point in time.

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 St. Joseph's Healthcare Hamilton, West 5th Campus redevelopment project indicates estimated cost savings of 14.2 per cent or \$133.3 million, by using the AFP approach in comparison to traditional delivery.



KPMG LLP completed the value for money assessment of the St. Joseph's Healthcare Hamilton project. Their assessment demonstrates projected

cost savings of 14.2 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 acted as the Fairness Monitor for the project. They reviewed and monitored the communications, evaluations and decision-making processes associated with the St. Joseph's Healthcare Hamilton West 5th Campus project, ensuring the fairness, equity, objectivity, transparency and adequate documentation of the process. Knowles Consultancy Services certified that these principles were maintained throughout the procurement process (please see letter on page 4).

Infrastructure Ontario is working with the St. Joseph's Healthcare Hamilton to develop the hospital, which will remain publicly owned, publicly controlled and publicly accountable.

Project description

Background

Infrastructure Ontario was created in 2005 to support the provincial government's *Renew Ontario* plan.

Under the *ReNew Ontario* plan, the provincial government assigned large projects to Infrastructure Ontario, which uses a 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.

Project Scope

The current St. Joseph's Healthcare Hamilton, West 5th Campus hospital provides specialized tertiary mental health services for residents living in the central south region of Ontario.

A new, specialized mental health and outpatient medical services hospital will be constructed at the West 5th Campus site.

At approximately 800,000 square feet, the new hospital includes an increased capacity for inpatient beds (305) and associated patient services. It will have expanded outpatient clinics for psychiatry, diagnostic imaging and medical services, along with research and academic spaces. The McMaster University Department of

Psychiatry will be located at the new centre. The new facility is designed to support patient and family-centred care.

Services offered will be expanded and enhanced for patients with long-term needs and outpatient/community based programs. Services will include assessment, treatment and rehabilitation. All rooms will be single patient and are designed to maximize patients' access to the outdoors.

Plenary Health will design, build, finance and for 30 years, maintain the West 5th Campus to Leadership in Energy and Environmental Design (LEED) Silver certification.

LEED buildings focus on healthy indoor environments, reduced greenhouse gas emissions and efficient use of energy, water and other resources. The hospital's LEED highlights include:

- drought tolerant and native or adaptive plant species used for landscaping;
- low emitting volatile organic compound materials will be used for adhesives, paints, carpet and sealants;
- Diversion of construction waste from landfill and support for recycling; and
- Use of low flow watering technologies.

Job Creation

The project will help provide economic stimulus by creating and supporting thousands of jobs. Labour will largely be drawn from the Greater Toronto Area. At the peak of construction, it is estimated that 650 workers will be on site daily.

Competitive selection process timeline

The Province has entered into a project agreement with Plenary Health to design, build, finance and maintain the new St. Joseph's Healthcare Hamilton West 5th Campus. The procurement stages for the project were as follows:

March 24, 2009

Request for Qualifications

In 2009, Infrastructure Ontario and St. Joseph's Healthcare Hamilton issued a request for qualifications for the project. Three building teams were pre-qualified:

- **Carillion Health Solutions:** Carillion, HOK Architects / Montgomery Sisam Architects, Vanbots and Carillion Services;
- **Integrated Team Solutions:** EllisDon Corporation, Fengate Capital Management Ltd., LPF Infrastructure Fund, Parkin Architects Limited / architects Tillmann Ruth Mocelin, EllisDon Construction, Johnson Controls and CIT Financial; and
- **Plenary Health:** Plenary Group / Innisfree, Cannon Design, PCL Construction, Honeywell Limited – Facilities Management and Meridiam.

December 17, 2009

Request for Proposals

A request for proposals (RFP) was issued to the pre-qualified 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 June 30, 2010. Three bids were received by Infrastructure Ontario and St. Joseph's Healthcare Hamilton. The bids were evaluated using the criteria set out in the RFP.

September 27, 2010

Preferred proponent notification

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

The Plenary Health consortium includes: Plenary Group / Innisfree, Cannon Design, PCL Construction, Honeywell Limited – Facilities Management and Meridiam.

December 7, 2010

Commercial and Financial Close

A project agreement between Plenary Health and St. Joseph's Healthcare Hamilton was announced.

January 2011 – summer 2014

Construction

Construction began shortly following the Financial Close agreement. 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 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 Plenary Health, Infrastructure Ontario and St. Joseph's Healthcare Hamilton.

Completion and payment

Plenary Health will receive a payment from the Province when the project reaches substantial completion, which is expected in late 2013. 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 2014- summer 2043

Maintenance

Plenary Health will maintain the new St. Joseph's Healthcare Hamilton West 5th Campus 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, comprising approximately 36 months of construction and a 30-year maintenance timeframe. Under the terms of the project agreement, Plenary Health will:

- design and build the West 5th Campus project;
- finance the construction and capital costs of the new hospital over the term of the project;
- obtain a third-party independent certification that the West 5th Campus 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, 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 does not meet the standards set in the agreement, it will face financial deductions.

The province will make a substantial completion payment of \$150 million for the new hospital. Plenary Health will be paid an average of \$34 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.

St. Joseph's Healthcare Hamilton West 5th Campus 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

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.

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. 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 will finance and construct the new complex. Plenary Health will receive a payment from the government at substantial completion, which is expected in late 2013. 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'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 documents.

Scheduling, project completion and delays

Plenary Health has agreed to reach substantial completion of the new West 5th Campus by late 2013 and total completion by summer 2014.

The construction schedule can only be modified in very limited circumstances, in accordance with the project agreement. Plenary Health's 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 Construction must be paid by Plenary Health.

Site conditions and contamination

Plenary Health 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 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 or any of its parties.

Development approvals

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

Mechanical and electrical systems responsibility

Plenary Health 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 is required to finance the construction of the project until the new St. Joseph's Healthcare Hamilton West 5th Campus is substantially complete. Plenary Health will be responsible for all increased financing costs should there be any delay in Plenary Health reaching substantial completion. This shifts significant financial risk to Plenary Health in the case of late delivery.

Commissioning and facility readiness

Plenary Health must achieve a prescribed level of commissioning of the new hospital at substantial completion and must co-ordinate the commissioning activity within the agreed-upon construction schedule. This ensures the Province will receive a functional building facility at the time payments to Plenary Health commence. Plenary Health will work closely with St. Joseph's Healthcare Hamilton to facilitate transition from the existing hospital to the new one.

Activity protocols

Plenary Health 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 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 IO and St. Joseph's Healthcare Hamilton;
- 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 owner-initiated scope changes;
- approval by Infrastructure Ontario for any change orders which exceed pre-determined thresholds; and
- approval by Infrastructure Ontario when the cumulative impact of the change orders exceed a pre-determined threshold.

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. Plenary Health's 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 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 under the project documents, the financing arrangement entered into between Plenary Health 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 St. Joseph's Healthcare Hamilton West 5th Campus redevelopment project, KPMG LLP's value for money assessment demonstrates a projected cost savings of 14.2 per cent, or \$133.3 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. 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 LLP 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.

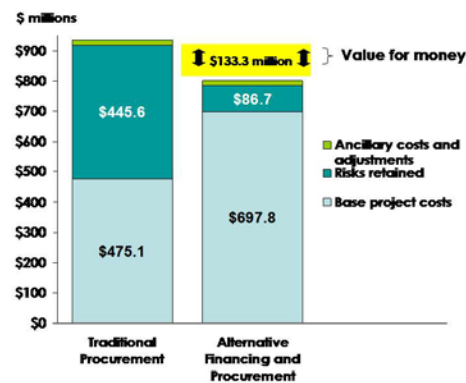
Model #1	Model #2
Traditional project delivery (Public sector comparator)	Alternative financing and procurement
Total project costs that would have been incurred by the public sector to deliver an infrastructure project under traditional procurement processes.	Total project costs incurred by the public 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 St. Joseph's Healthcare Hamilton West 5th Campus project indicates estimated cost savings of 14.2 per cent or \$133.3 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 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 West 5th Campus project, these were \$697.8 million.

If the traditional model had been used for the hospital project, base costs are estimated to be \$475.1 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 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 13-14, 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:

- 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 St Joseph's Healthcare Hamilton 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 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 Health.

A detailed risk analysis of the project concluded that the average value of project risks retained by the public sector under traditional delivery is \$445.6 million. The analysis also concluded that the average value of project risks retained by the public sector under the AFP delivery model decreases to \$86.7 million. This is a savings of \$358.9 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.

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 West 5th Campus project under the traditional delivery method are estimated to be \$6.2 million as compared to \$18.2 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 \$9.1 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 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 St. Joseph's Healthcare Hamilton, West 5th Campus, the estimated traditional delivery cost (i.e. PSC) is \$936 million as compared to \$802.7 million under the AFP delivery approach.

The positive difference of \$133.3 million or 14.24 per cent represents the estimated value for money by using the AFP delivery approach in comparison to the traditional delivery model.