





# Value-for-Money Assessment Halton Healthcare's Milton District Hospital Expansion

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21 July 2015

Ms. Divya Shah Acting Senior Vice President, Transaction Finance Infrastructure Ontario 777 Bay Street, 9th Floor Toronto, ON M5G 2C8

Dear Ms. Shah:

#### Re: Value for Money Analysis - Milton District Hospital Redevelopment Project

Ernst & Young Orenda Corporate Finance ("EYOCF") has prepared the Value for Money ("VFM") assessment for the Milton District Hospital Redevelopment Project at the Financial Close ("FC") stage. The analysis was prepared following an Infrastructure Ontario ("IO") VFM analytical framework, which is generally consistent with approaches used in other jurisdictions.

The VFM assessment is based on a comparison of the total project costs of the Milton District Hospital Redevelopment Project under:

- The Traditional delivery approach, as reflected in the Public Sector Comparator ("PSC") model; and
- The Alternative Financing and Procurement ("AFP") model estimation of the total project costs, as reflected in the Adjusted Successful Bid.

The VFM assessment as noted above was prepared using the following information (collectively the "Information") within the VFM model:

- A Risk Matrix developed for IO by Altus Group Limited and adjusted to reflect project specific risks; and
- Construction and other cost estimates as reflected in the Successful Bid. Other VFM model assumptions as provided by IO.

The cost information and underlying assumptions were not independently audited or verified for accuracy or completeness.

The results of the VFM assessment demonstrate an estimated VFM cost savings of 20.5% by using the AFP approach to deliver the Project in comparison to using the traditional delivery approach.

Yours sincerely,

Einst & young Orenda Corporate Finance Dre.

ERNST & YOUNG ORENDA CORPORATE FINANCE INC.

A member firm of Ernst & Young Global Limited



December 5th, 2014

Mr. Michael Inch Vice President, Procurement Infrastructure Ontario 777 Bay Street, 9th Floor Toronto, Ontario M5G 2C8

### Subject: Alternative Financing and Procurement for the Milton District Hospital Redevelopment Project RFP No. 13-386P

Dear Mr. Inch:

P1 Consulting was retained to perform fairness auditing services and provide an independent attestation on the Milton District Hospital Redevelopment Project (the "Project) procurement process. Our mandate was to review and monitor the bid documents and communications, provide advice on best practices, review and monitor the evaluation and decision-making processes that are associated with the Request for Proposals (RFP) to ensure fairness, equity, objectivity, transparency and adequate documentation throughout the evaluation process.

The Project entails the construction of a new diagnostic, therapeutic and inpatient building that will link to the existing Milton District Hospital building via a service tunnel and walkway. The Project is intended to provide for the addition of a capacity of approximately 99 inpatient beds. The key programs in the new building include: emergency, security and surgical services; inpatient medical/surgical units; and critical care, maternal newborn and diagnostic imaging services.

In our role as Fairness Monitor, 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, and the evaluation process;
- 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.



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Mr. Michael Inch December 5th, 2014 Page 2 of 2



The Fairness Monitor 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 RFP Documents;
- Commercially Confidential Meetings with the Proponents;
- Site and facility visits by the Proponents;
- Review of the RFP Addenda, Requests for Information (RFI) and Notices;
- Review of evaluation process and guideline; and
- Proposal receipt, bid evaluation and selection of the Negotiation Proponents.

As the Fairness Monitor for the Milton District Hospital Redevelopment Project, we certify that, at the time at which this report was prepared, 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,

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Jill Newsome Lead Fairness Commissioner

## Artist's concept of the Milton District Hospital expansion project



Courtesy of Plenary Health

### Highlights of Milton District Hospital Expansion Project:

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Size	• Approximately 330,000 square feet of space will be added to the existing 125,000 sq. ft. facility.	
Number of beds	Capacity for 129 inpatient beds	
Patient benefits	<ul> <li>A facility with a range of health services including:</li> <li>expansion of emergency and surgical services, medical/surgical inpatient units, critical care, maternal newborn and diagnostic imaging and support services</li> <li>overall capacity increase from 63 to 129 inpatient beds</li> <li>eighty per cent single-patient rooms for improved infection prevention and control and to provide increased patient privacy and a quieter healing environment</li> <li>addition of the hospital's first Magnetic Resonance Imaging (MRI) machine</li> <li>a Level 2A Special Care Nursery with capacity for eight bassinettes in the Maternal Newborn Unit</li> </ul>	

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Environmentally	Leadership in Energy and Environmental Design (LEED®) Silver certification. Highlights	
Sustainable Design	include:	
	<ul> <li>Construction Activity Pollution Prevention</li> <li>Water Use Reduction</li> <li>Water Efficient Landscaping – 50%</li> <li>Minimum Energy Performance</li> <li>Enhanced Refrigerant Management</li> <li>Outdoor Air Delivery Monitoring</li> <li>Low-Emitting Materials –</li> <li>Composite Wood and Agrifiber Products</li> </ul>	

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### Summary

The Milton District Hospital expansion project 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, on behalf of the Province, plays a key role in procuring and delivering infrastructure projects. 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 expansion of Milton District Hospital is being delivered under the Province's AFP model.

The expansion will add 330,000 square feet of space to the existing 125,000-square-foot hospital. Designed to address the needs of all users, including seniors, children, individuals with visual or cognitive impairments and those using wheelchairs and other mobility aids, the project will focus on meeting the care needs of those living in Milton, the fastest-growing community in Canada.

# The public sector retains ownership, control and accountability for Milton District 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 Milton District Hospital Expansion Project through the AFP process.

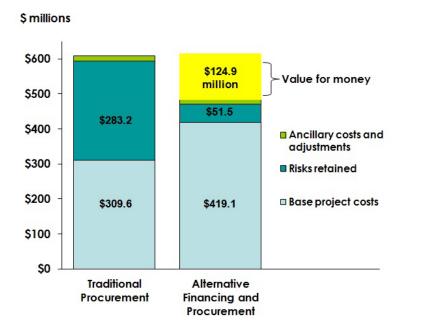
The value-for-money analysis refers to the process of developing and comparing the total project costs under two different delivery models expressed in dollar values measured at the same point in time.

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	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.

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 Milton District Hospital expansion project indicates estimated cost savings of 20.5 per cent, or \$124.9 million, by using the AFP approach in comparison to traditional delivery.



Ernst & Young completed the value-for-money assessment of the Milton District Hospital expansion project. Their assessment demonstrates projected cost savings of 20.5 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.

P1 Consulting acted as the Fairness Monitor for the project. They reviewed and monitored the communications, evaluations and decision-making processes associated with the Milton District Hospital expansion project, ensuring the fairness, equity, objectivity, transparency and adequate documentation of the process. P1 Consulting certified that these principles were maintained throughout the procurement process (see letter on page 3).

Infrastructure Ontario is working with Halton Healthcare to expand Milton District Hospital, 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
- 5. all processes must be fair, transparent and efficient.

### **Project Scope**

Milton District Hospital is part of Halton Healthcare, which is a progressive, multi-site healthcare organization comprised of three community hospitals - Georgetown Hospital, Milton District Hospital and Oakville Trafalgar Memorial Hospital. Together these hospitals provide healthcare services to more than 300,000 residents in the communities of Oakville, Milton and Halton Hills. Halton Healthcare hospitals have been recognized for their best practices in a number of patient safety and patient care initiatives. In 2013, Halton Healthcare was accredited with exemplary standing — the highest possible status granted by Accreditation Canada. In 2015 Halton Healthcare will be celebrating the completion of the new Oakville Hospital, one of the largest healthcare infrastructure projects in Ontario.

The Milton District Hospital expansion will offer easy access to a wide variety of healthcare services to the community. The 330,000-square-foot expansion will address the needs of all users, including seniors, children, individuals with visual or cognitive impairments and those using wheelchairs and other mobility aids. The project will focus on meeting the care needs of those living in Milton, the fastestgrowing community in Canada.

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

The expanded Milton District Hospital will strive to provide an environment that is:

- Patient, client and family centred enabling maximum independence, and supporting individuals on their journey towards recovery along with supports for preventive care and management of health issues.
- A great place to learn where students, staff and volunteers have opportunities to pursue education.
- A great place to work where hospital staff can collaborate and work effectively in a supportive environment.
- Flexible in its design so that the expansion can meet current and future needs.
- A community asset environmentally sustainable and welcoming to the public.

### Job Creation

The project will help provide economic stimulus by creating and supporting hundreds of jobs. At the peak of construction, it is estimated that 500 workers will be on site daily.

### Competitive selection process timeline

Halton Healthcare has entered into a project agreement with Plenary Health to design, build, finance and maintain the Milton District Hospital expansion project. The procurement stages for the project were as follows:

### August 15, 2013

Request for Qualifications

In 2013, Infrastructure Ontario and Halton Healthcare issued a request for qualifications, which resulted in three building teams being pre-qualified:

### **Hospital Infrastructure Partners**

Developer: Carillion Canada Inc., EllisDon Capital Inc., Fengate Capital Management Ltd. Constructor: EllisDon Corporation Architect: Parkin Architects, in joint venture with WZMH Architects Financial Advisor: Scotiabank Facility Manager: Carillion Canada Inc., EllisDon Corporation

### Milton Healthcare Partnership

Developer: HOCHTIEF PPP, Innisfree Limited Constructor: Bondfield Construction Company Limited, Canadian Turner Inc. Architect: Diamond Schmitt Architects Inc., in association with Gunsul Frasca Architects Financial Advisor: Investec Facility Manager: Honeywell

### Plenary Health

Developer: Plenary Group (Canada) Ltd. Constructor: PCL Constructors Canada Inc. Architect: B+H Architects, RTKL Associates Financial Advisor: RBC Capital Markets Facility Manager: Johnson Controls

### April 11, 2014

Request for Proposals

A request for proposals (RFP) was issued to the shortlisted 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 October 21, 2014. Three bids were received. The bids were evaluated using the criteria set out in the RFP.

### Preferred proponent notification

Plenary Health 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.

### March 24 and 27, 2015

Commercial and Financial Close

A project agreement between Plenary Health and Halton Healthcare was announced.

### Spring 2015 to spring 2017

### 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 Inc.

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 Halton Healthcare.

### Completion and payment

Plenary Health will receive a payment from the Province when the project reaches substantial completion, expected in spring 2017. This payment will be followed by monthly service payments over a 30-year period for construction of the expansion, building maintenance, lifecycle repair and renewal, as well as project financing.

### Spring 2017 to 2047

### Maintenance

Plenary Health will maintain Milton District Hospital for 30 years and be responsible for building maintenance, repair and lifecycle replacement during that period.

### Project agreement

### Legal and commercial structure

Halton Healthcare entered into a project agreement with Plenary Health, comprising approximately 24 months of construction and a 30year maintenance timeframe. Under the terms of the project agreement, Plenary Health will:

- design and build the expansion;
- finance the construction and capital costs of the expansion over the term of the project;
- obtain a third-party independent certification that the expansion 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

Halton Healthcare 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 expansion 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 \$125 million for the expansion once built. Plenary Health will be paid an average of \$1.1 million each month for a 30-year period for the construction of the expansion, building maintenance, lifecycle repair and renewal, as well as project financing.

Milton District Hospital expansion project will be publicly owned and publicly controlled. The centre 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 expanded 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. 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 expansion. Plenary Health will receive a payment from the government at substantial completion, which is expected in spring 2017. This payment will be followed by monthly service payments over a 30-year period for construction of the expansion, 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 by spring 2017.

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

Costs associated with delays that are the responsibility of PCL Constructors Canada Inc. 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 expansion, 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 hospital is substantially complete. Plenary Health will be responsible for all increased financing costs should there be any delay in reaching substantial completion. This shifts significant financial risk to Plenary Health in the case of late delivery.

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### Commissioning and facility readiness

Plenary Health must achieve a prescribed level of commissioning of the expansion at substantial completion and must co-ordinate the commissioning activity within the agreed-upon construction schedule. This ensures Milton District Hospital will receive a functional building facility at the time payments to Plenary Health commence. Plenary Health will work closely with Milton District Hospital to facilitate transition from other facilities.

### 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 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 Milton District 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

### 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 Milton District Hospital expansion project, Ernst & Young's value-for-money assessment demonstrates a projected cost savings of 20.5 per cent, or \$124.9 million, by using the alternative financing and procurement approach, as compared to the traditional procurement approach.

Ernst & Young 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 valuefor-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 Ernst & Young 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.

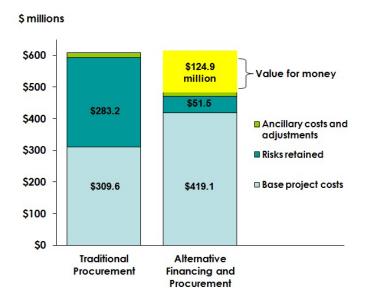
The cost difference between model #1 and model #2 is referred to as the value for money. If the total cost to deliver a project under the AFP approach (model #2) is less than the total cost to deliver a project under the traditional delivery approach (model #1), there is said to be positive value for 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 value-for-money assessment of the Milton District Hospital expansion project indicates estimated cost savings of 20.5 per cent, or \$124.9 million, by using the AFP approach in comparison to traditional delivery.

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valued and the value-formoney methodology, please refer to Assessing Value for Money: А 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.

 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 \$419.1 million.

If the traditional model had been used for the hospital project, base costs are estimated to be \$309.6 million.

### Risks retained

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

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-

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 12-13, 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 expansion 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 Milton District 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.

A detailed risk analysis of the project concluded that the average value of project risks retained by the public sector under traditional delivery is \$283.2 million. The analysis also concluded that the average value of project risks retained by the public sector under the AFP delivery model decreases to \$51.5 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 Architectural advisory fees. and engineering advisory fees are also incurred to ensure the expansion 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 million as compared to \$12.3 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 \$7 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 Ernst & Young 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 Milton District Hospital project, the estimated traditional delivery cost (i.e. PSC) is \$607.8 million as

compared to \$482.9 million under the AFP delivery approach.

The positive difference of \$124.9 million, or 20.5 per cent, represents the estimated value for money by using the AFP delivery approach in comparison to the traditional delivery model.