Ontario

INFRASTRUCTURE ONTARIO

VALUE FOR MONEY ASSESSMENT

NORTH BAY REGIONAL HEALTH CENTRE

www.infrastructureontario.ca

PRICEWATERHOUSECOOPERS

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Private & Confidential

March 16, 2007

Bert Clark,
Senior Vice President
Infrastructure Ontario
777 Bay Street, Suite 900
Toronto, Ontario M5G 2C8

Dear Mr. Clark:

Re: North Bay Regional Health Centre Project Value for Money Assessment

We have prepared the Value for Money ("VFM") assessment of the North Bay Regional Health Centre project ("NBRHC Project") in accordance with the terms of our contract with Infrastructure Ontario ("IO") dated September 6, 2005.

For the NBRHC Project, the VFM summary assessment is based on a comparison of the total project costs at financial close as follows:

1. The traditional delivery approach reflected in the Public Sector Comparator ("PSC") model as compiled by us; and
2. The Alternative Financing and Procurement ("AFP") approach based on the final offer of the successful proponent.

Based on the above analysis, the NBRHC Project demonstrates projected VFM savings of $56.7 million (or 8.7%) under the AFP approach compared to the traditional delivery approach.

We did not audit or attempt to independently verify the accuracy or completeness of the information or assumptions underlying the PSC, which were provided by IO, and/or the successful proponent's final offer, nor have we audited or reviewed the successful proponent's financial model.

Yours truly,
John Casola
Partner

April 18, 2007

Mr. Steven Richards
Vice President, Project Legal Services
Infrastructure Ontario
777 Bay Street, 9th Floor
Toronto, Ontario M5G 2C8

Subject: North Bay Regional Health Centre Alternative Financing and Procurement Project

Dear Mr. Richards:

P1-Consulting acted as the Fairness Commissioner to review and monitor the communications, evaluations and decision-making processes that were associated with the procurement process for the **North Bay Regional Health Centre Alternative Financing and Procurement Project Infrastructure Ontario, North Bay General Hospital & the Northeast Mental Health Centre Project** in terms of ensuring fairness, equity, objectivity, transparency and adequate documentation of the evaluation process.

North Bay General Hospital and Northeast Mental Health Centre plan to develop a shared facility on a common site to be known as the North Bay Regional Health Centre (NBRHC). Both NBGH and NEMHC will have their own facility on a common 80-acre greenfield site to maximize the use of the shared services. The NBRHC will be a one-stop site which will offer a state-of-the-art acute care hospital as well as a modern, long-term mental health facility, all within one cooperative health care campus.

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

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

In our role as Fairness Commissioner, we actively participated in the following steps in the process to ensure that fairness was maintained throughout:

- Project kick-off meeting
- Review of the Draft RFQ and RFP Documents
- Review of the RFQ and RFP Addenda
- Commercially Confidential Meetings with the pre-qualified Proponents
- Review of evaluation process and guideline
- Proposal receipt and evaluation
- Oversight of the Negotiation Process

The final step in the process, which we oversaw, was for the Sponsors to select Plenary Health as the Preferred Proponent.

As the Fairness Commissioner for the **North Bay Regional Health Centre Alternative Financing and Procurement Project Infrastructure Ontario, North Bay General Hospital & the Northeast Mental Health Centre Project**, we certify that the principles of fairness, openness, consistency and transparency have, in our opinion, been maintained throughout procurement process. Furthermore, no issues emerged during the process, of which we were aware, that would impair the fairness of this initiative.

Yours truly,

Louise Panneton
Lead Fairness Commissioner

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An important note on terminology:

The North Bay Regional Health Centre is a joint redevelopment project bringing together the North Bay and District Hospital (currently called the North Bay General Hospital) and the Northeast Mental Health Centre into one, state-of-the-art health care complex. Though co-located at the same facility, the North Bay and District Hospital and the Northeast Mental Health Centre will remain independent bodies. Except where the features of the North Bay and District Hospital and the Northeast Mental Health Centre are being described, in this document, the term "North Bay Regional Health Centre" or "NBRHC" will be used to describe either or both of these organizations, as the context requires.

North Bay Regional Health Centre
Artist's rendering

Critchley Delean Trussler Evans Bertrand Architects (North Bay)

Expansion of Services

The North Bay Regional Health Centre project will improve access to health care services for North Bay and the surrounding communities:

	Current service level	New service level	Per cent increase
North Bay General Hospital Emergency Department patient visits	43,000	57,000	33%
North Bay General Hospital Outpatient Clinic services	40,000	63,000	58%
North Bay General Hospital Critical Care Unit beds	10	16	60%
North Bay General Hospital Rehabilitation Unit beds	10	29	190%
North Bay General Hospital Complex Continuing Care beds	10	42	320%

Summary

In 2005, the provincial government implemented *ReNew Ontario 2005-2010*, a $30-billion-plus strategic infrastructure investment plan to modernize, upgrade and expand Ontario's public infrastructure, including health care facilities. Projects are assigned to Infrastructure Ontario when it is deemed appropriate to use the made-in-Ontario project delivery model called Alternative Financing and Procurement (AFP) – one of the tools developed to overcome the infrastructure deficit in the province.

The new North Bay Regional Health Centre (NBRHC) will bring together two separate health care facilities – the North Bay and District Hospital and the Northeast Mental Health Centre. The NBRHC will be a new, 720,000 square foot, state-of-the-art acute care and specialized mental health facility, located on an 80-acre campus.

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 will be achieved by using the AFP model to build, finance and maintain the NBRHC.

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

Model #1 **Traditional delivery (Public Sector Comparator)**	**Model #2** **Alternative Financing and Procurement (AFP)**
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.

Property One Consulting acted as the independent Fairness Monitor for this project. They reviewed and monitored the communications, evaluations and decision-making processes associated with the NBRHC project, ensuring fairness, equity, objectivity, transparency and adequate documentation of the process. Property One certified that these principles were maintained throughout the procurement process**.**

PricewaterhouseCoopers LLP undertook the value for money assessment of the project. Their findings indicate projected cost savings of $56.7 million (8.7 per cent) by delivering the NBRHC using the AFP model, compared to what it would cost using a traditional delivery model.

Infrastructure Ontario will work with the NBRHC to manage the construction of the new hospital.

The public sector retains ownership, control and accountability for the North Bay Regional Health Centre.

Project description

Background

Through *ReNew Ontario*, the government is investing more than $5 billion to modernize, expand and upgrade hospitals across the province. (An update to *ReNew Ontario* is available at www.pir.gov.on.ca.)

Infrastructure Ontario is an essential component of *ReNew Ontario*. The Crown corporation was established in 2005 to ensure that large, complex infrastructure projects are delivered on time and on budget.

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

The Province approved the NBRHC project to be delivered under the AFP model as part of the renewal plan. The NBRHC was one of the first major projects assigned to Infrastructure Ontario. It is a joint redevelopment project bringing together the North Bay General Hospital (to be renamed the North Bay and District Hospital) and the Northeast Mental Health Centre into one, state-of-the-art health care complex.

All public infrastructure projects in Ontario, including the NBRHC, are guided by the five principles set out in the Province's *Building a Better Tomorrow* Framework:

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 NBRHC redevelopment project involves the new construction of a 720,000 square foot, state-of-the-art acute care hospital and specialized mental health facility co-located on an 80-acre health care campus as well as hard facility management and lifecycle maintenance services of both facilities (see sidebar, page 7).

The new North Bay and District Hospital will serve a district-wide population of 129,000 from a new three-storey building that includes 275 acute care beds; a new ambulatory care centre to accommodate more than 63,000 patient visits per year; and a larger emergency department with 32 treatment stretchers to accommodate 57,000 emergency visits annually.

The new Northeast Mental Health Centre will provide specialized mental health services to the entire Northeast region of the province, serving a regional population of more than 500,000. The new facility will be a two-storey, village-like 113-bed specialized mental health centre. It will house 52 forensic psychiatry beds, 61 specialized mental health beds; and a client services mall, gymnasium, workshop, psychiatric offices and clinical and administrative areas.

The hospitals and their respective facilities will continue to be publicly owned.

Design features

The NBRHC will be a high-performance, "green" facility, designed for resource efficiency, cost effectiveness and patient comfort.

The NBRHC will seek Leadership in Energy and Environmental Design (LEED) certification, ensuring environmentally-sustainable and healthy facilities for all users.

North Bay and District Hospital features

The new facility reflects the hospital's commitment to deliver compassionate care to patients:

- an increased percentage of single rooms and more spacious double-rooms designed to provide each patient a window view;
- advanced communication technology for patient response, including a nurse call system based on silent pagers and cellular phones;
- a decentralized food service with a servery on each floor that will allow patients to select their meals shortly before mealtime;
- a wide "Main Street" hallway that runs the length of both facilities on site;
- windows that open to provide fresh air and give patients more control over their environment; and
- design features to maximize the amount of natural light into patient rooms and public areas.

Northeast Mental Health Centre features

Design of the facility is based on a best practice psycho-social model offering a comfortable healing environment that leads to better clinical outcomes. Features include:

- a two-storey facility with inpatient "lodges" that are interconnected to secure inner courtyards and a village-like environment; and
- a two-storey amenity and therapeutic support building at the heart of the village that will house a client services mall, gymnasium, workshops, psychiatric offices, clinical space and administrative functions.

Facility management and maintenance

Hard facility management

These are services associated with the day-to-day management of the physical plant, such as maintaining the elevator, electrical and mechanical systems, ventilation systems and other similar maintenance work. Other services include moving, parking lot hard surface maintenance, grounds maintenance – excluding landscaping and snow removal – installation of the IT backbone and involvement in the coordination of medical equipment procurement.

Lifecycle maintenance

Lifecycle maintenance represents the total cost of ownership of products, structures or systems over their useful life. With respect to this project, "lifecycle costs" are defined as the costs involved in the replacement and refurbishment of a facility's base buildings and their systems and equipment. These include the costs of managing and maintaining the facility, including the base buildings (i.e., the acute care hospital and the specialized mental health facility themselves), and base building equipment (i.e., generators or HVAC systems). These costs are meant to address the replacement and refurbishment needs of those components that fall within hard facilities management as well as the fabric of the buildings (i.e., walls, floors, etc.). Lifecycle costs are typically capital costs.

Soft facility management

These are services (non-clinical) unrelated to the physical plant that are managed by the hospital, not Plenary Health, and are not included in the AFP model for hospital projects. These might include laundry and linen services, portering and housekeeping and waste services. Other services not included in AFP hospital projects include information technology services, patient food services, material management, medical equipment maintenance, diagnostic services, hospital management, pharmacy and clinical care.

Competitive selection process timeline

The NBRHC has entered into a build, finance and maintain contract with the Plenary Health consortium ("Plenary Health") comprised of the Plenary Group, Deutsche Bank AG, PCL Constructors Canada and Johnson Controls Inc. The procurement stages for the NBRHC project were as follows:

September 27, 2005 – November 7, 2005

Request for Qualifications (RFQ)

A request for qualifications was issued inviting interested builders to submit their qualifications to undertake the project. Three consortia qualified as RFP proponents:

- Hospital Infrastructure Partners – Carillion Canada Inc., EllisDon Corporation, CIT Financial, LPF Realty (owned 100 per cent by Labourers' Pension Fund of Central and Eastern Ontario;
- Plenary Health – Plenary Group. Deutsche Bank AG, PCL Constructors Canada, Johnson Controls Inc.; and
- SNC Lavalin – SNC-Lavalin Engineers and Constructors Inc., SNC-Lavalin Investments, SNC-Lavalin Profac

March 3, 2006 – October 19, 2006

Request for proposals (RFP)

A request for proposals was issued to the qualified proponents, setting out the bid process and proposed agreement to build, finance and maintain the facility. Hundreds of questions were submitted by bidders during the bid process, reflecting the increased risk builders have taken on as part of the project agreement.

Bid submission

Bids were submitted by the RFP proponents in October 2006 and evaluated by Infrastructure Ontario and the NBRHC using criteria set out in the RFP.

January 19, 2007

Plenary Health was selected as the preferred proponent on the basis of their proposed price, project schedule, project management, development and construction plan, facilities maintenance experience and financing package.

February – March 2007

Commercial and financial close

The project agreement was executed by Plenary Health and NBRHC. Plenary Health's financing partner – Deutsche Bank AG – provided the financing Plenary Health will require to construct the new facility in accordance with the project agreement.

March 2007 – 2010

Construction

Construction began on March 24, 2007 and is scheduled to be substantially completed by 2010. During the construction period, Plenary Health's construction costs will be financed by their funding partner – Deutsche Bank AG.

Summer 2010

Completion and payment

It is anticipated that the project will reach substantial completion in 2010, at which time payments for the construction will commence. Monthly payments will also include payment for maintenance and lifecycle replacement and repair.

2010 – 2040

Maintenance and building lifecycle replacement and repair

Plenary Health will be responsible for the "hard" facilities maintenance. These are services associated with the day-to-day management of the physical plant, such as maintaining the elevator, electrical and mechanical systems, ventilation systems and other similar maintenance work. Other services would include moving to the new facility, parking lot hard surface maintenance, grounds maintenance, excluding landscaping and snow removal, and involvement in coordination of medical equipment procurement.

Project agreement

Legal and commercial structure

The NBRHC entered into a 33-year project agreement comprising a 39-month construction period and a 30-year maintenance timeframe.

Under the terms of the agreement, Plenary Health will:

- build and finance the new health centre, which will be completed in 2010, ;
- provide a finance package for the construction;
- submit to a third-party compliance architect/engineer certification that the facility is built to specifications;
- provide the hard facility management and lifecycle maintenance on the new centre for the next 30 years and will meet or exceed the maintenance performance standards in the contract; and
- ensure that, at the end of the contract term, the buildings meet the conditions specified in the agreement.

The NBRHC will make monthly payments to Plenary Health based on performance achieved corresponding to user satisfaction, as defined in the contract. The NBRHC will not commence these payments until the hospital is ready to open to the public. Moreover, if Plenary Health does not meet the standards set in the agreement, it will face financial penalties.

Annual payments of $35 million will be made to Plenary Health (paid on a monthly basis), subject to partial indexation, based on cost of living and changes in labour rates, insurance costs and energy and utilities.

Construction, completion and lifecycle risk

Key risks associated with the construction of the facilities have been transferred to Plenary Health by way of the project agreement, including:

Construction price certainty

Plenary Health will construct the facility and will be repaid for construction, hard facility management and lifecycle maintenance costs over 30 years after the facility is complete**.** Plenary Health's payment may only be adjusted in very specific circumstances, agreed to in advance, in accordance with the detailed variation (or change order) procedures set out in the project agreement.

Scheduling, project completion and delays

Plenary Health has agreed to reach substantial completion of the construction of the facilities in 2010. The construction schedule set out in the project agreement 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 facility and it has been certified as complete by an independent consultant).

Design coordination

The project agreement provides that Plenary Health is responsible for design coordination activities to ensure that the facilities are constructed in accordance with the design. An example of a design coordination risk is if a fan is shown on mechanical drawing, but is not connected on electrical drawings.

Site conditions and contamination

Plenary Health accepted the site and the site conditions and shall not be entitled to make claims against the hospitals on any grounds relating to the site. Furthermore, Plenary Health shall be responsible for 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 and renewing all development approvals (other than the NBRHC permits, licences and approvals); and complying with all development approvals.

Design and lifecycle responsibility

Plenary Health shall be responsible for, and shall rectify at its own expense all of the following:

- errors or omissions in the design which are readily discoverable or reasonably inferable as forming part of the works or contrary to good industry practice;
- design coordination issues caused by errors, omissions, conflicts, interferences or gaps contained within the design, and particularly, the plans, drawings and specifications; and
- design completion issues where the intent can be reasonably inferred in the design but is not fully detailed or specified.

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 the existing 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.

Leadership in Energy and Environmental Design (LEED) design and construction obligations

Plenary Health shall perform the works so as to achieve the prerequisites and credits required to achieve LEED certification. In the event that LEED certification is not obtained within 24 months after the substantial completion date, Plenary Health shall pay liquidated damages to NBRHC.

Change order protocol

In addition to the variation procedure set out in the project agreement, Infrastructure Ontario's change order protocol with the NBRHC sets out the principles for any changes to the project work/scope during the construction period, including:

- proper processing and approval of change orders is required from the Hospital;
- specifying the limited criteria for change orders to be processed and applied;
- timely notification of change orders to Infrastructure Ontario;
- Infrastructure Ontario's approval is required for all owner-initiated scope changes;
- Infrastructure Ontario's approval is required for any change orders which exceed pre-determined thresholds; and
- Infrastructure Ontario's approval is required when the cumulative impact of the change orders exceeds a pre-determined threshold.

The project agreement also stipulates that Plenary Health is required to comply with specific costing schedules for change orders.

Facilities maintenance risk

Key risks associated with the maintenance of the facilities over the 30-year service period have been transferred to Plenary Health by way of the project agreement, most notably, hard facilities management and lifecycle maintenance responsibility. Plenary Health shall be responsible for the hard facilities maintenance and building lifecycle repair and replacement required to ensure the facilities meet the performance requirements set out in the project agreement (see sidebar, page 7). Furthermore, specific performance standards relating to the hard facilities management services are built into the project agreement. Plenary Health's payment under the project agreement is contingent on their ability to perform to those standards.

LEED certification

The new facility will be designed to comply with Leadership in Energy and Environmental Design (LEED) requirements. LEED buildings must meet high standards that address matters such as indoor air quality and energy efficiency. These buildings enjoy some of the highest user satisfaction rates in North America.

Achieving value for money

PricewaterhouseCoopers' value for money assessment demonstrates a projected cost savings of 8.7 per cent, or $56.7 million, by using the alternative financing and procurement (AFP) approach to deliver the NBRHC project, as opposed to the traditional procurement approach.

PricewaterhouseCoopers LLP (PWC) was engaged by Infrastructure Ontario to prepare a value for money assessment. Their assessment was based on the value for money assessment methodology outlined in *Assessing Value for Money: A Guide to Infrastructure Ontario's Methodology*, which can be found at www.infrastructureontario.ca. The approach was developed in accordance with best practices used internationally and in other Canadian provinces, and was designed to ensure a conservative, accurate and transparent result. (Please refer to the letter from PWC on page 2).

Value for money concept

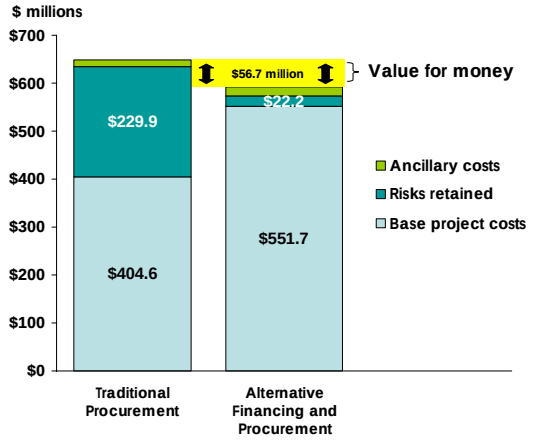
The goal of the AFP approach is to deliver a project on time and on budget and to provide real cost savings for the public sector.

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

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

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

The value for money assessment is developed by obtaining detailed project information and input from multiple stakeholders, including internal and external experts in hospital project management and construction project management. Components of the total project costs under each delivery model are illustrated below:



The total cost of the project agreement entered into with Plenary Health is shown as "base project costs" in the AFP model in the chart above. Additional costs are included in the value for money assessment, and are shown as ancillary costs and retained risks. A more detailed breakdown for this project is provided in the pages that follow.

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

example, it would be difficult to put a dollar value on the people of Ontario gaining access to a new health facility sooner than would be the case with a traditionally-financed project.

Other unquantifiable benefits relate to the existence of Infrastructure Ontario – a central organization to coordinate the development of a number of projects. Infrastructure Ontario has standardized documents, increased up-front due diligence and applied best practices to each of its projects; however, it would be difficult to quantify these benefits.

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

Value for money analysis

The cost components in the analysis include only the AFP portions of the project costs. Non-AFP related project costs, such as building permits, furniture, fixtures and equipment are the same in both delivery models and are excluded from the value for money analysis.

For a fair and accurate comparison, the traditional delivery and AFP costs are present-valued to the project's financial close date using the technique of discounting. It is Infrastructure Ontario's policy to use the current public sector rate of borrowing for this purpose. The financial close date of this project was March 14, 2007. For more information on discounting and value for money methodology, please refer to *Assessing Value for Money: A Guide to Infrastructure Ontario's Methodology*, which is available online at www.infrastructureontario.ca.

Base Costs

As indicated earlier, base project costs represent the price of the contract signed with Plenary Health in today's dollars, and generally include construction, maintenance, lifecycle and financing costs. The base costs between AFP and the traditional delivery model differ for two main reasons:

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

In the case of the AFP model, the base costs are taken from the project agreement. For the NBRHC project, these were $551.7 million.

If the traditional model had been used for the NBRHC project, base costs would have been estimated at $404.6 million.

Risks Retained

The public sector has always had to bear costs that go beyond a project's base costs. A significant reason why total project costs always exceed base costs is due to project risks.

Project risks may be defined as adverse events that have a direct impact to costs that the public sector bears in order to deliver the project.

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 exclusively borne by the public sector (which are called "retained risks") should be identified and accurately quantified. The broad risk categories include:

- Policy/Strategic;
- Design/Tender, Construction;
- Lifecycle; and
- Operations.

Comprehensive risk assessment not only allows for precise value for money analysis, but also helps

Infrastructure Ontario and the public-sector sponsors ensure that the party best able to manage, mitigate and/or eliminate the project risks, is allocated those risks under the project agreement.

Under the traditional delivery method, the risks retained by the public sector would be significant. As discussed on pages 9-10, the following are examples of risks retained by the public sector under the traditional delivery method that have been transferred under the project agreement from the Province to the private sector:

- Scheduling, project completion and delays;
- Design coordination;
- Site conditions and contamination;
- Development approvals;
- Utility company fees;
- Design and lifecycle responsibility;
- Mechanical and electrical systems responsibility;
- LEED design and construction obligations; and
- the cost overruns associated with these risks.

Examples of these risks include:

- *Design coordination/completion:* Under the AFP approach the builder is responsible for all design coordination activities to ensure that the facilities are constructed in full accordance with the design. The builder is now responsible for: errors, omissions, conflicts, interferences or gaps in the contract documents and particularly in the plans, drawings and specifications; and design completion issues which are specified in the contract documents but erroneously left out in the drawings and specifications.
- *Scheduling, project completion and delays:* Under the AFP approach, the builder has agreed that it will reach substantial completion of the construction by a fixed date and at a fixed price to the Province. 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 a clear motivation to maintain the project's schedule. Further oversight includes increased upfront due diligence and project management controls imposed by both the private party's lender and project sponsors.
- *Space availability risks*: Under the AFP approach, the private party is paid only if certain performance criteria are met and only if the facility is available for use in a manner that meets the standards and requirements of the hospital/province. Therefore, the private partner under AFP has incentive to ensure that the operation of the facility is up to standard.

Under the traditional approach, these risks would have been borne by the public sector. For example, design coordination risks that materialized 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 always result in an increase in overall project costs.

Furthermore, by including building maintenance in these contracts, the government receives a 30-year warranty for maintenance and upgrades on the facility. The contract provides a strong incentive to construct a high-quality, functional facility that can be maintained efficiently, providing public sector value for money in both the short and long term. The warranty under a traditional building project is about 1-2 years.

The added due diligence brought by the lenders, together with the risk transfer provisions in the construction contract, results in overall cost savings as these transferred risks will either be better managed or completely mitigated by the private-sector builder.

A detailed risk analysis of the NBRHC project concluded that the average value of project delivery risks retained by the public sector under traditional delivery are $229.9 million. The analysis also concluded that the average value of project

risks retained by the public sector under the AFP delivery model are $22.2 million.

For more information on the risk assessment methodology used by Infrastructure Ontario, please refer to the third party risk assessment report by Altus Helyar, available at www.infrastructureontario.ca.

Ancillary Costs

There are significant costs associated with the planning and delivery of a large complex project that could vary depending on the project delivery method. For example, there are costs related to each of the following:

- *Project management:* These are essentially fees to manage the entire project. Under the AFP approach, these fees will be augmented by the incremental costs of Infrastructure Ontario providing its services.
- *Transaction costs:* These are costs associated with delivering a project and primarily consist of legal fees. Under the AFP approach, in addition to legal, these fees will also include capital markets, fairness and transaction advisory fees. Architectural and engineering advisory fees are also incurred to ensure the facility is being built according to specifications.

These costs are quantified and added to both models for the value for money comparison assessment. Project management and transaction costs, both, are likely to be higher under AFP given the greater degree of up-front due diligence. The ancillary costs for the NBRHC project, under the traditional delivery method are estimated to be $5.6 million as compared to $18.0 million under the AFP approach.

An additional 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. In the case of the NBRHC project, this adjustment is an addition of $8.4 million to the PSC. For a detailed explanation on competitive neutrality, 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 PWC concludes that the additional costs associated with the AFP model are more than offset by the benefits of the AFP procurement model, which include; a much more rigorous upfront due diligence process, increased risk transfer to the private consortium, and controls imposed by both the lender and standardized procurement process.

Once all the cost components and adjustments are determined, the total costs associated with each delivery model (i.e., traditional delivery and AFP) are calculated, and expressed in Canadian dollars, at financial close. In case of the NBRHC project, the estimated total project cost under the traditional delivery method is $648.5 million as compared to $591.9 million under the AFP delivery approach.

The positive difference between the total project costs represents the value for money for using the AFP delivery approach, and is usually expressed in percentage terms. For the NBRHC project, estimated cost savings of 8.7 per cent over the traditional delivery model were demonstrated.