



STAFF REPORT ACTION REQUIRED

George Street Revitalization: Recommended Procurement and Delivery Strategy

Date:	June 14, 2016
To:	Executive Committee
From:	Deputy City Manager, Cluster A Deputy City Manager & Chief Financial Officer
Wards:	All Wards
Reference Number:	P:\2016\Internal Services\FAC\Ec16009fac (AFS 22526)

SUMMARY

In November 2015, City Council endorsed the project scope for the George Street Revitalization (GSR) and the Seaton House transition plan. Council directed staff to retain procurement option consultants and to report back by June 2016 on the recommended delivery model, the implementation funding needed and the resulting refined capital cost estimates for the revitalization and the Seaton House transition plan. This report fulfils that directive.

As a result of the work undertaken by Ernst & Young Orenda Corporate Finance Inc. (EY), it is evident that the City stands to gain from a range of benefits available through a Public-Private-Partnership (P3), referred to by the Province of Ontario as Alternative Financing and Procurement (AFP). The Gardiner Rehabilitation Project, approved by Council in September 2015, will be the City's first P3 project.

On the basis of EY's findings and the extensive due diligence completed on the GSR project over the past two years, staff recommend a Design-Build-Finance (DBF) procurement and delivery model. A DBF model will yield an estimated Value for Money (VFM) of 8.1%, equivalent to \$43.9 million on a present value basis. A DBF model transfers the responsibilities and associated risks for the design, construction and financing to the private sector and leverages on project investments made to date. A DBF model combines various aspects of project delivery under one contract, allowing for the bidding consortium to coordinate activities, realize economies of scale, be innovative with respect to design and scheduling, and manage potential cost escalation risks. As a P3 model, construction payments for a DBF are made only upon substantial completion, projected at 2022 or beyond.

Based on a DBF model, the revised construction cost estimate for the project is \$498.8 million which includes \$155.6 million in quantified retained risk which may or may not materialize. With the Seaton House transition cost estimate of \$50 million and project expenditures to date of \$13.2 million, the total capital cost for the George Street Revitalization is estimated at \$562 million of which \$475.2 million remains unfunded.

This report recommends that the funding for the GSR project be considered as part of the 2017 budget process with other City priorities. It also recommends that the City initiate negotiations towards an agreement with Ontario Infrastructure and Lands Corporation (IO), to propose a scope of services under which IO could act as the commercial procurement lead. Staff will report back with a status update on negotiations.

The report also provides an update on the status of the Seaton House transition plan. Staff have been working with key stakeholders to develop a comprehensive transition plan for clients. The plan, with a Housing First approach, includes purchase of service of up to 150 supportive housing units and 200 housing allowances. The plan also considers best practices for transitioning a vulnerable population and involving clients in decision making. Health and other forms of support are being identified with the clients and service partners. The report seeks Council authority to begin implementing the Seaton House transition plan, with funds available in the Shelter, Support and Housing Administration (SSHA) 2016 Approved Capital Budget.

As directed by Council in November 2015, this report also provides a status update on negotiations with the Province of Ontario for the terms of possible rights to acquire the property and buildings at 311 Jarvis Street and 354 George Street. The site, across the street from Seaton House, could be developed for affordable and mixed housing and other uses once vacated in 2022. The Province is receptive to dialogue with the City regarding the future use of those properties.

RECOMMENDATIONS

The Deputy City Manager, Cluster A, and the Deputy City Manager & Chief Financial Officer recommend that:

1. City Council authorize the Deputy City Manager, Cluster A, and the Deputy City Manager & Chief Financial Officer to proceed with an Alternative Financing and Procurement (AFP) model for the implementation of the George Street Revitalization project using a Design-Build-Finance approach as described herein, and refer the project to the 2017 Capital Budget process for consideration by the City Manager and Deputy City Manager & CFO with other City priorities;
2. City Council authorize the Deputy City Manager, Cluster A, and the Deputy City Manager & Chief Financial Officer, in consultation with the City Solicitor, to initiate negotiations towards an agreement with Ontario Infrastructure and Lands Corporation (IO), under which IO and other third-party advisors could:

- a. act as a commercial procurement lead for the AFP approach, through to execution of project agreements and financial close; and
 - b. propose a scope of services, terms and estimated cost for professional services required to support the AFP delivery model;
3. City Council direct the Deputy City Manager, Cluster A, and the Deputy City Manager & Chief Financial Officer to seek funding options for the George Street Revitalization project from the Government of Canada's 10-year Social Infrastructure Plan and from the Province of Ontario;
4. City Council authorize the General Manager, Shelter, Support and Housing Administration, to begin implementing the Seaton House transition plan, with funds available in the SSHA 2016 Approved Capital Budget;
5. City Council authorize the General Manager, Shelter, Support and Housing Administration, to negotiate with Mental Health Program Services of Metropolitan Toronto (commonly known as Habitat Services) for the purchase of service for up to 150 units of housing with access to on-site supports, as described in this report and endorsed by City Council in November 2015, and submit a business case for consideration by the City Manager and Deputy City Manager & Chief Financial Officer as part of the 2017 budget process;
6. City Council direct the General Manager, Shelter, Support and Housing Administration, to approach the Province and request enhanced funding to provide additional supports as needed for clients housed in Habitat Services supportive housing units and to support clients with serious and persistent mental health issues moving into scattered site housing; and
7. City Council direct the Deputy City Manager, Cluster A, and the Deputy City Manager & Chief Financial Officer to report back by December 2016 to Executive Committee and Council with a status update on negotiations with Infrastructure Ontario and recommendations, if any, on terms and estimated costs for professional services required to support the AFP procurement, further refined cost estimates, a governance structure, and an updated project schedule.

Financial Impact

Procurement Recommendation

The City retained Ernst & Young (EY) to conduct a procurement options analysis in accordance with Ontario Infrastructure and Lands Corporation (IO) methodology. The Comments section of the report describes the process and the options that were reviewed.

The results of a quantitative Value for Money (VFM) analysis indicate that the recommended Design-Build-Finance (DBF) procurement is estimated to result in lower overall project delivery costs by a factor of approximately 8.1%, equivalent to \$43.9 million on a present value basis, compared to the costs that would be expected under a conventional procurement (Design-Bid-Build). The cost of the DBF procurement method is estimated at \$498.8 million which will bring the total capital cost of GSR project to \$562 million as noted in the Table 1 below.

Total Refined Project Costs

Hanscomb Ltd. was engaged by the City in 2015 as a cost consultant for the GSR project. Those construction costs, based on a Class "C" estimate, were used by EY for modelling purposes. Based on the recommended DBF method and associated capital cost estimates (but subject to the cost of the successful bid), the total estimated cost of the project is \$562 million. In addition, the ongoing operating impact of capital is estimated to be \$9 million, to be included in future year budget submissions.

This total estimated project amount includes expenses incurred to date, estimated costs for the DBF procurement and Seaton House transition costs, calculated as follows:

Table 1: Summary of Total Project Costs (in millions of dollars)

Type	Spent to Date (May 31/2016)	Projections June – Dec 2016	Project Start*	GSR Total Capital Cost
Land	9.4			9.4
Project Management & Architectural Costs	3.8	2.0	37.9	43.7
Construction			458.9	458.9
Transition (Capital)		0.5	49.5	50.0
Total Capital Cost of the Project	13.2	2.5	546.3	562.0
Less: Amount funded to date and included in the App. 10-year Capital plan				(83.6)
Less: IAH** Funding for 21 affordable units				(3.2)
Unfunded Capital Cost of the Project				475.2

* Project Start refers to the date the project is approved and funded.

** IAH is the provincial Investment in Affordable Housing Program.

Staff recommend that City Council consider the procurement delivery model and the associated costs for the GSR project and forward the project to the City Manager and Deputy City Manager & CFO for consideration with other City priorities as part of the 2017 budget process. Project approval will require additional debt funding in the amount of \$475.2 million which currently falls outside the City debt affordability target of 15%.

DBF Model and Associated Costs

Project costs for the DBF model were calculated as follows:

○ Construction: \$458.9 million, includes:	
- base costs:	\$278.1 M
- private financing costs:	<u>\$ 25.2 M</u>
Sub-total (payable at substantial completion)	\$303.3 M
- quantified retained risks (which may or may not materialize)	<u>\$155.6 M</u>
	<u>\$458.9 M</u>
○ Project ancillaries (inclusive of all soft costs from June 1, 2016 to the end of construction)	<u>\$ 39.9 M</u>
Total	<u>\$498.8 M</u>

For DBF procurement, the contractor would finance the work during design and construction and at substantial completion, the City would pay 100% of the capital costs: construction plus financing, a total of \$303.3 million. However, the City would be responsible for ancillary costs including owner's engineering consultants both pre-construction and during construction, at a cost of \$39.9 million.

Quantified retained risk is the estimated value of major P3/AFP project risks retained by the City (i.e. not transferred to the private sector) to undertake the project under a particular procurement delivery model. Figures are indicative in nature, and based on a risk matrix agreed by the City with input from its consultants through multiple workshop discussions led by EY.

Under DBF, design risk would be transferred to the private sector. The total risk-adjusted cost of the DBF model of \$498.8 includes \$155.6 million to address quantified risks retained by the City, such as City approvals, scope changes initiated by City, latent defects, and termination for convenience. Should any of these risks not materialize, any unused amount is retained by the City.

Under the recommended approach and preliminary project schedule, the City would not make any construction payments until substantial completion, projected at 2022 or beyond. Around the time of completion, the City would begin to issue the necessary debt to finance the project, and start to incur debt service costs in the operating budget. These debt service costs would normally be funded from the tax base.

All of the estimates above are based on current project cost estimates, schedules and applicable interest rates, and would be built into the preliminary 2017-2016 Capital Budget and Plan.

Transition Plan: Capital Budget

The SSHA 10-Year Capital Plan approved by City Council in February 2016 includes funding in the amount of \$69.578 million to be directed towards project management and redevelopment costs for the GSR project. The Seaton House transition plan capital costs have been estimated at \$50 million.

The transition plan's capital costs include the acquisition and renovation of two new permanent shelter sites and renovation costs for two leased sites. The amount for one-time capital costs for the acquisition of two sites, as indicated in the report adopted by Council in November 2015 is \$20 million and the estimated renovation costs for the four sites is \$23 million.

This report recommends that Council authorize the implementation of the Seaton House transition plan, with funds available in the SSHA 2016 Approved Capital Budget. There are three factors contributing to the recommendation: (1) Seaton House does not meet the needs of vulnerable men and must be redeveloped regardless of the GSR project; (2) the search, acquisition and renovation of suitable sites is a long and complex process; (3) should Council approve the GSR project, the site must be vacant and ready for demolition within a limited time-frame or the City risks project delays and penalties.

Should Council defer the GSR project or not approve funding, SSHA would seek Council authority to allocate funds from its Approved 10-Year Capital Plan as part of future-year budget processes, to continue implementing the transition plan. The four new sites would be retained by SSHA to maintain service levels until an alternative plan were to be submitted to Council for consideration.

Other Funding Sources

Long-Term Care

The long-term care home component will qualify for funding from the Ministry of Health and Long Term Care (MOHLTC). Funding is based on the MOHLTC *Construction Funding Subsidy Policy for Long-Term Care Homes*, 2015, providing a per diem amount for a 25-year period after construction is completed. The amount is based on \$16.65 base construction per diem plus \$1.00 additional per diem if LEED Silver is achieved. The total for the 25 years is \$60.9 million ($\$17.65 \times 378 \text{ beds} \times 365 \text{ day/year} \times 25 \text{ years}$).

The cost of construction for a long-term care home is cost shared with the MOHLTC, but the service provider is required to provide upfront funding for each redevelopment project. Accordingly, the City must pay upfront the full cost of construction before any provincial contribution is forthcoming. As the provincial subsidy is spread out over 25 years, the actual present value of the provincial \$60.9 million would be less in terms of today's dollars. At its May 2015 meeting, City Council adopted a motion that requested the Minister of Health and Long-Term Care to review the Enhanced Long-Term Care

Home Renewal Strategy and include a construction funding escalation factor above the fixed rate per diem to account for inflation.

Section 37

Staff are in discussions with the Ward Councillor to determine if Section 37 funds could be allocated to heritage restoration and to public realm improvements for the project. It is estimated that restoration, adaptive reuse and integration of six heritage buildings will cost approximately \$15.9 million and are included in the capital budget. Public realm improvements in front of the City property on the east side of George Street are estimated at \$1.21 million and are also included in the capital budget. Public realm improvements across from the City property and on the west side of George Street are estimated to cost approximately \$2.6 million and are not included in the budget. No estimates are available for public realm improvements beyond this area.

Green Funds

There will be many green initiatives incorporated into the George Street project. The site is anticipated to have LEED Silver designation and to meet Toronto Green Standards Tier Two. Staff are exploring potential sources of funding incentives for the green initiatives.

Acquisition of Adjacent Properties

As authorized by Council in July 2013 (EX33.17), the City has acquired the eight properties adjacent to Seaton House lands required for incorporation into the redevelopment project in the amount of \$9.377 million. The initial acquisition of five properties occurred in April of 2014 and the remaining three were finalized in January of 2016. The acquisition of the properties was funded from the Land Acquisition Reserve Fund (LARF) and included in the GSR project capital costs.

The Deputy City Manager & Chief Financial Officer has reviewed this report and agrees with the financial impact information.

Equity Impact

The emergency shelter, long-term care home and community support systems in Toronto serve equity-seeking groups including seniors, people with disabilities, individuals with mental health and/or substance use issues, the working poor and other vulnerable groups. Effective operation of the shelter system and provision of long-term care is important to ensuring that appropriate accommodation is available to a variety of equity-seeking groups and contributes to the City's Poverty Reduction Strategy.

The project recommended in this report will create a facility that assists shelter residents to stabilize their lives and move back into permanent housing as quickly as possible. It will provide a safe, healthy and comfortable environment that promotes independence, mobility, and individuality for long-term care and assisted living residents.

The service hub will serve people in the community in an environment where they are comfortable and safe. An open door policy will ensure all vulnerable populations and community members at large are welcomed as valued members in a mutually supportive environment.

DECISION HISTORY

At its meeting of April 5, 2016, Toronto and East York Community Council adopted the report *Preliminary Report – 295-349 George Street – Official Plan Amendment – Zoning Amendment Applications*. Community Council directed staff to schedule a community consultation meeting with the Ward Councillor.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.TE15.25>

At its meeting of March 31 and April 1, 2016, City Council adopted the report *George Street Revitalization – Continuation of Consultant Services*. Council authorized staff to enter into an extension to December 31, 2016 to the amending agreements with two consultants (Prism Partners Inc. as project managers and Montgomery Sisam Architects).

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.EX13.11>

At its meeting of January 13, 2016, Executive Committee received for information the report *Impacts of the George Street Revitalization on Shelter Capacity*. The report outlines the impact of the GSR project on overall shelter occupancy and strategies to meet Council's 90% occupancy target in all sectors.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.EX11.4>

At its meeting of November 3 and 4, 2015, City Council unanimously adopted the report *George Street Revitalization – Recommended Scope and Approach*. Council endorsed the project scope for the George Street Revitalization and the Seaton House transition plan and forwarded them to the City Manager for consideration with other City priorities as part of the 2016 budget process. Council also authorized staff to retain procurement options consultants to conduct an analysis of the project procurement and delivery options. <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.EX9.6>

City Council on May 5, 6 and 7, 2015, adopted the report, "Provincial Funding for Enhanced Long-Term Care Home Renewal Strategy" requesting that the Minister of Health and Long-Term Care include a construction funding escalation factor above the fixed rate per diem to account for inflation.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.CD3.7>

At the meeting on December 16-18, 2013, City Council adopted the report, *Long-Term Care Homes & Services Capital Renewal Strategy*. The report sought authorization for LTCHS to proceed with its capital renewal planning based on the proposed framework and to undertake necessary due diligence to proceed with planning based on the framework and strategy, which include integrating and co-locating services as part of the GSR project.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.CD25.8>

At its meeting of July 16-19, 2013, City Council unanimously adopted a staff report, *Update and Next Steps of Proposed Redevelopment of Seaton House and Revitalization of George Street*. Council approved in principle the redevelopment of Seaton House and authorized the General Manager of SSHA, in consultation with the General Manger of LTCHS, to undertake the necessary due diligence required to proceed with the recommended project and directed staff to report back in 2015 on the status of the redevelopment, related financing plans and a transition plan for Seaton House clients.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.EX33.17>.

ISSUE BACKGROUND

At its meeting of November 3 and 4, 2015, City Council endorsed the project scope for the George Street Revitalization and the Seaton House transition plan. The scope includes a men's shelter with 100 beds, a transitional living program with 130 beds, a long-term care home with 378 beds, 21 units of affordable housing and a community hub. Staff were authorized to retain procurement option consultants and to report back by June 2016 on the recommended delivery model, the implementation funding needed and the resulting refined capital cost estimates for the revitalization and the Seaton House transition plan.

This report responds to Council's directive and also provides an update on the status of negotiations with the Province of Ontario for the property and buildings at 311 Jarvis Street and 354 George Street.

As noted in the report adopted by Council on November 3, 2015, the GSR project was initially divided into two stages: Project Stage One as the due diligence phase culminating in that report to Council and Project Stage Two as the implementation phase. The division into two stages was based on the assumption that the project would be delivered by the City via a traditional Design-Bid-Build (DBB) model. RFPs for prime consulting services (project management and architectural) were structured to reflect that plan.

Two significant factors altered that plan: (1) in November 2015, Council directed staff to engage procurement option consultants, and (2) this report recommends a transition from the current DBB approach to a DBF model. Thus the former two-stage project plan is no longer applicable.

The City has limited experience with P3s. To date, City Council has approved one project for procurement through a P3 model: the [F.G. Gardiner Expressway Strategic Rehabilitation](#). Council is also considering a P3 option for the [Scarborough Subway Extension](#) and has directed staff to retain consultants to explore options. The George Street Revitalization would be the City's first venture into a P3 delivery for a human services capital project. Infrastructure Ontario has not previously worked on any P3/AFP procurements for either long-term care homes or shelters. However IO has experience with other complex, integrated projects such as the PanAm Athletes' Village, Bridgepoint Health, Mount Sinai Hospital, CAMH, Humber College Redevelopment and the Toronto South Detention Centre.

This report describes:

- I. Procurement Options Analysis & Value for Money
- II. Update on Transition Plan
- III. Update on Provincial Lands

COMMENTS

I. Procurement Options Analysis & Value for Money

In February 2016, Ernst & Young Orenda Corporate Finance Inc. (EY) were engaged to complete procurement, delivery options, and Value for Money (VFM) analysis for the George Street Revitalization (GSR) project. The analysis would determine whether the project has potential as Public-Private-Partnership (P3), also known in Ontario as Alternative Financing and Procurement (AFP). An executive summary of the EY report is provided in Attachment 2. Minor discrepancies in sums between the staff report and Attachment 2 are due to rounding.

This section of the report outlines the project procurement and delivery options considered by EY, followed by EY's analysis in four parts:

- Qualitative Analysis
- Market Sounding
- Quantitative Analysis: Value for Money
- Additional Considerations by EY

The synopsis of EY's analysis is followed by staff's review and recommendation for a procurement model, a potential role for IO, resulting required professional services, and next steps.

Project Procurement / Delivery Options

The initial 'long list' of procurement and delivery options comprised eight models:

- Design-Bid-Build (DBB)
- Construction Management (CM)
- Design-Build (DB)
- Integrated Project Delivery (IPD)

including four P3 models:

- Build-Finance (BF)
- Design-Build-Finance (DBF)
- Design-Build-Finance-Maintain (DBFM)
- Design-Build-Finance-Operate-Maintain (DBFOM).

Refer to Attachment 1 for a brief overview.

The IPD model was removed as a potential procurement option as it was considered to be a relatively new delivery method that lacks an overall industry consensus. The DBFOM model was also removed as a potential procurement option given the City's intent to retain control of the programmatic elements for the project. Thus the qualitative analysis proceeded with six models.

Qualitative Analysis

A qualitative procurement options analysis (POA) was conducted to short-list the procurement options that would move forward to the quantitative VFM assessment phase. Qualitative evaluation criteria were reviewed by EY and the City, and weighted in terms of relative importance, reflecting City objectives. There were 23 evaluation criteria (e.g. timeliness, asset flexibility, sustainability, design compliance, cost certainty, risk allocation, etc). The six long-listed procurement options were scored against each of the qualitative evaluation criteria.

Table 2 below summarizes scoring of the procurement options against the identified evaluation criteria. The maximum potential score for the qualitative assessment is 455 points.

Table 2: Summary of Qualitative POA

Procurement Option	DBB	CM	DB	DBF	BF	DBFM
Overall Weighted Score	346	351	322	342	358	388

BF, DBF and DBFM were the highest-scoring P3 models and reflected the support of the market sounding process. EY conducted a quantitative analysis on three models. The DBB model was also carried forward to serve as comparative "baseline"/traditional option to represent current City procurement / delivery processes.

Market Sounding

EY also conducted a market sounding to provide preliminary information regarding the project to the market, to assess the capability and appetite to carry out the project and to obtain feedback to help develop an efficient and effective procurement option. Senior executives at 22 organizations were interviewed, including developers / equity providers / constructors (6), long-term care providers (5), financiers (3) and non-profit or community organizations (5).

Participants stressed the importance of ensuring that necessary approvals and due diligence are completed by the City prior to the procurement period. Overall, the project was considered to be a very attractive opportunity for most participants, regardless of the delivery model selected. Market sounding participants also indicated that any uncertainty related to approvals would diminish market interest in the project.

Quantitative Analysis: Value for Money

A VFM analysis was conducted to quantitatively express the difference in cost of delivering an infrastructure project using the traditional public sector project procurement model as compared to any alternative delivery models. EY used the Infrastructure Ontario (IO) approach to the VFM analysis. The IO VFM methodology was also used for the Gardiner Expressway Rehabilitation and is underway for the Scarborough Subway Extension project.

The VFM analysis involved a detailed quantitative assessment of the three shortlisted procurement options, BF, DBF and DBFM, with the objective to assess whether these procurement models will achieve greater VFM to the public as compared to the DBB procurement model.

In quantifying the costs associated with the three selected P3 models, a risk assessment was conducted to determine the expected value of risks retained by the City. The foundation for risk allocation is based on the premise that the party which is able to manage a given risk most efficiently (i.e. at the lowest cost) should assume that risk. A series of subsequent risk workshops were held to solicit feedback from third party consultants, City managers and directors, and the GSR project executive committee. Once the identified risks had been quantified, their value (i.e. the expected cost of these risks should they materialize) was incorporated into the project cash flows in order to compare the procurement models on a risk-adjusted basis.

Class "C" construction costs were estimated in 2015 by Hanscomb Ltd who had been engaged for the GSR project. They were provided to EY for modelling purposes.

Financial assumptions were estimated by EY based on current market conditions and precedent projects. The discount rate used represents the City's cost of borrowing.

EY calculated the base case DBB traditional model costs as follows:

○ nominal costs for base (construction):	\$287.4 M
○ financing costs	\$ 6.6 M
○ retained risks	\$199.8 M
○ project ancillaries	<u>\$ 48.6 M</u>
Total risk-adjusted cost	<u>\$542.4 M</u>
(served as the baseline for comparison to two models, the BF and DBF)	

Under the BF and DBF options, the City will make a lump Substantial Completion Payment at construction completion to pay for construction and financing costs. In addition, the City will incur monthly costs related to project ancillaries such as advisors, permits, project management, and technical and financial resources throughout the construction period.

The base case DBB with 30-year maintenance was calculated as follows for the DBFM modelling:

○ net present value for:	
- construction	\$273.2 M
- maintenance	\$173.6 M
- lifecycle costs	\$ 55.9 M
- retained risks	\$308.2 M
- ancillary costs	<u>\$ 43.7 M</u>
Total cost	<u>\$854.6 M</u>

For the DBFM modelling, construction and operating estimates were also provided by Hanscomb. In this model, Project Co would be responsible for financing project costs during construction through debt and equity. Project Co or Project Company is the legal private sector entity that manages the project and is the contractual counterparty to the City. At substantial completion, the City would make a lump sum payment in the amount equal to 50% of the project capital costs and the remaining 50% would be paid for by the City through the annual service payments over the 30-year contract period. For the purposes of this analysis the lump sum payment is assumed to be at 50% similar to recent market transactions; however the exact size of this payment will be determine during the procurement phase. Sensitivity analysis was also conducted on differing levels of lump sum payment.

The results are summarized in Tables 3, 4 and 5 below:

Table 3: Base Case Comparative Value for Money Results (BF Model)

Base Case Comparative Value for Money Results		
Base Case Value for Money Results (\$M)	DBB	BF
Total Cost	542.5	495.9
Estimated Value for Money (cost difference)		46.5
Estimated Value for Money (% difference)		8.6%

Table 4: Base Case Comparative Value for Money Results (DBF Model)

Base Case Comparative Value for Money Results		
Base Case Value for Money Results (\$M)	DBB	DBF
Total Cost	542.5	498.1
Estimated Value for Money (cost difference)		44.6
Estimated Value for Money (% difference)		8.2%

Table 5: Base Case Comparative VFM Results (DBFM Model)

Base Case Comparative VFM Results		
Base Case VFM (\$M)	DBB	DBFM
Total Cost	\$854.5	\$821.8
Estimated Value for Money (cost difference)		\$32.7
Estimated Value for Money (% difference)		3.8%

EY concluded that the analysis demonstrates that the BF, DBF and DBFM delivery options all produce reasonable levels of VFM as compared to the DBB delivery option, and that the VFM produced is robust and able to withstand reasonable deviations in the underlying assumptions.

However, EY also stated that the existence of project VFM is only one factor that needs to be considered when determining which delivery option is the appropriate choice for project procurement. The different delivery options each have differentiating characteristics such as increased risk transfer or reduced flexibility that can provide the sponsor with various outcomes that can be beneficial or restrictive.

EY also summarized the advantages and disadvantages of each model. These are considered in the Staff Review and Recommendation section of this report.

Additional Considerations by EY

While acknowledging the VFM produced by a P3 model, EY identified three other factors for the City to consider in selecting a model: (1) City staff experience with P3 procurement; (2) procurement schedule; and (3) transition of Seaton House residents.

1. City Staff Experience with P3 Procurement

A P3 approach would be a novel project delivery approach for City staff, and may require the addition of supplementary staff, outside of its existing procurement and project delivery resources (including third party consultants). It will also require significant training of City resources to ensure that the P3 process and documentation are fully understood and accepted. This process could lead to delays, for example, related to procurement development of long-term project-outputs, documentation development, and negotiation of agreements.

The City may leverage existing, market-tested policies, processes and template documentation, including the widely-accepted IO process/documents. However, any templates applied to this project would require amendments to tailor to the specific and unique requirements of the GSR.

2. Procurement Schedule

Procurement timelines and stages vary across the respective short-listed delivery models.

The BF model is a hybrid of the traditional and P3 model, creating a bundled, single contract for private sector provision of construction and financing requirements based on City (or City consultant) generated design, while the City is responsible for the operation and maintenance of the completed asset. Similar to the traditional model, the BF model allows the City more control over the separate project phases. However, several procurements will be required for separate components of the project delivery.

The DBF model features a single contract for the design, construction and financing of the Project. This model typically requires a longer pre-procurement period, including additional due diligence and planning requirements prior to tendering. The pre-procurement requirements would include the completion of the City's indicative designs, fully completed Project Specific Output Specifications (PSOS), RFP documentation, Project Agreement to govern the construction period plus any additional warranty period. As the design and construction requirements are tendered under a single contract, there is only one procurement period, and a single contract. Following construction completion the City would assume the operation and maintenance activities.

The DBFM model's procurement schedule is similar to that of the DBF but includes the maintenance of the project within the single contract. The project agreement additionally includes governance of the 30 year maintenance period, a payment mechanism to detail the payment structure and the penalty regime over the contract period, and other procurement and compliance related materials. As the design, construction, financing and maintenance requirements are tendered under a single contract, there is only one procurement period, and a single contract to award and manage for all phases including the long term 30 year maintenance component.

Table 6 below is a summary comparison of key project dates for each of the four models outlined above:

Table 6: Comparison of Estimated Construction Dates under the 4 Models

Milestone	DBB	BF	DBF	DBFM
Demolition / Construction start	Dec 2017	Aug 2018	Dec 2018	Jan 2019
Construction completion	Sept 2021	May 2022	Sept 2022	Oct 2022

The time lines shown reflect EY's estimates and staff's recommendation to initiate negotiations with IO and report back to Council by December 2016.

The P3 delivery models (BF, DBF, DBFM) offer greater construction completion schedule certainty as compared to the DBB delivery model, though the DBF and DBFM delivery models provide the greatest construction completion schedule certainty due to the transfer of both design and construction phase related risks.

3. Transition of Seaton House Residents

As EY notes, the City has identified potential delays related to the relocation of current Seaton House residents as a key risk and critical factor in project delivery. Residents are expected to be relocated prior to the commencement of demolition/construction activities. Facilities are to be selected, refurbished and/or potentially built for temporary resident housing during the construction period. The risk associated with resident transition would not be easily transferrable to the private sector under any procurement delivery model. The City expects to retain this risk, noting that the issuance of tender documents would not occur without an approved transition plan.

Any delays related to the transition could impact the overall project timeline by delaying the procurement process, regardless of the delivery model selected. However, under P3 procurement it is crucial that the City provides the P3 partner access to the site at contract award. Any delays in access to the site will add additional costs to the City.

Staff Review and Recommendation

In order to assess EY's report and develop the best possible recommendation for Council, a number of meetings were held with staff and EY during the months of May and June. These sessions included presentations by EY for senior staff, a discussion involving senior staff with EY, IO and GSR project consultants to review the status of the GSR design, and a presentation by EY to the GSR project executive and other senior staff on the defining advantages and disadvantages of the two shortlisted models, BF and DBF.

Staff reviewed the results of the VFM as well as the advantages and disadvantages for each model as put forward by EY.

The City stands to gain from a range of benefits available through a P3 model, including a VFM in each of the models considered. Given the size, complexity and risks associated with the GSR project, the DBB traditional model does not appear to have sufficient advantage over the P3 models. Furthermore, a P3 model is attractive to the City in that construction payments are made only upon substantial completion, thereby addressing the current debt ceiling issue that the City faces for its capital projects. Staff therefore do not recommend the DBB model and the GSR would be the first human services capital project that the City procures through a P3 model.

DBFM ties the City to a 30-year maintenance contract. Given that Canada has a limited history with DBFM and that this project would be the City's first for such a commitment, staff deem that there are too many unknowns posing potential risks. In considering DBFM, staff also took into account the nature of the GSR project and the people it is intended to serve. As a home to vulnerable women and men, the facility will adapt to changing needs and demands. The GSR community service hub will also be an ever-evolving program as it responds to the changing needs of the residents and the local community. A DBFM model provides limited flexibility to accommodate changes in use due to the 'locked-in' 30-year maintenance contract. Furthermore, such a model requires City expertise and resources to manage the P3 contract over the long term. The City's experience of deferred maintenance resulting from budget cutbacks and changing priorities would appear to lend support for DBFM. However, given MOHLTC regulations for maintenance of a long-term care home (approximately 50% of the site) and given the shared nature of the entire facility's infrastructure, it is expected that all programs will benefit from the required legislated maintenance. Staff do not consider DBFM a viable option.

BF is similar to DBB in that the City has full control over the design as well as the future adaptability of the facility. The BF model maximizes stakeholder input during the design phase and provides maximum leverage on project investments to date. While the City retains greater control over design and construction, the City retains design risks that could possibly result in change orders. The responsibilities and risks transferred from the City to the private sector through the BF model are construction and financing. This model provides increased incentive for the private sector to complete construction on a timely basis.

Under the DBF model, the City transfers the responsibilities and risks of design, construction and financing to the private sector. Award to a consortium allows for coordination of design and construction activities, yielding potential efficiencies in project delivery. DBF will require the development of a PSOS. The resulting competitive process and three bidding teams may create the potential for additional design and cost innovation.

Under a DBF, the City retains the risk of incomplete or missing information in the tender documentation and the PSOS, possibly resulting in the delivery of a sub-optimal design/asset and cost. Development of a PSOS document may be time- and resource-intensive, possibly requiring additional staffing resources.

The City has been working with stakeholders and private sector consultants for two years, exercising due diligence to determine program and design needs, to maximize design and cost innovation and to mitigate risks within a constrained site. Best practices and innovation were incorporated during the development of the functional program and the design within the site constraints and municipal Planning regulations. Approximately fifty percent of the entire facility is a long-term home regulated through an extremely prescriptive design, with LEED Silver designation. As further due diligence, Gillam Group Inc was retained in June 2015 as a constructability review consultant.

Staff acknowledge that both BF and DBF models may be viable for the GSR project. In developing their recommendation, staff considered both the common elements and the essential differences in the BF and DBF models. Commonalities between the two are:

- a. Both scores were close for the Qualitative Analysis: 358 for BF, 342 for DBF.
- b. The Value for Money is very comparable: 8.6% for BF (worth \$46.5 million) and 8.1% for DBF (worth \$43.9 million).
- c. The estimated total project costs are very similar: BF \$495.9 million and DBF \$498.8 million.
- d. The total quantified retained risks for the BF are worth \$153.5 million and for the DBF are worth \$155.6 million. In both models, unused funds assigned to retained risks which did not materialize remain with the City.
- e. The City can leverage project investments made to date.
- f. The City transfers the responsibilities and associated risks for the construction and financing to the private sector.
- g. There is increased incentive for the private sector to complete construction on time, as compared to the DBB delivery model.
- h. The City pays the construction costs upon substantial completion, i.e. 2022 or beyond. This will address the current debt ceiling issue that the City faces.
- i. The City is responsible for all municipal Planning approvals.
- j. There are similar dates for completion of construction.
- k. The City retains full control over post-occupancy day-to-day operations and maintenance.
- l. The City can accommodate future changes in use of the facility.

Risk allocation for both BF and DBF models is identical with the exception of three risks as indicated in Table 7 below:

Table 7: Differences in Risk Allocation Between Two P3 Models: BF and DBF

Risk	BF		DBF	
	City	Contractor	City	Contractor
Project schedule during design phase	100%	0%	0%	100%
Design innovation	100%	0%	0%	100%
Regulatory approvals	100%	0%	50%	50%

For regulatory approvals: under the DBF the contractor assumes responsibility for some construction-related approvals and permits. Under the BF, the City would obtain all approvals and permits prior to awarding the construction contract.

The key advantages and disadvantages specific to each model were discussed with EY and are summarized in Table 8 below.

Table 8: Summary of Key Advantages & Disadvantages for BF and DBF

Procurement Model	Key Advantages	Key Disadvantages
BF	<ul style="list-style-type: none"> Greater flexibility & control over design Fully maximizes leverage for City investments to date Private sector incentivized to complete on time 	<ul style="list-style-type: none"> Potential schedule delays during the design project phase and between the design and construction project phases City retains design risk, potential for change orders
DBF	<ul style="list-style-type: none"> Coordination of design and construction activities (responsibility and risk transferred) Design- and construction-related delays transferred to private sector Greatest construction completion schedule certainty 	<ul style="list-style-type: none"> Contract negotiations & PSOS (City's first DBF) are time- and resource-intensive for City Incomplete PSOS may lead to sub-optimal design / asset

Staff consider that the City, as an organization, continues to develop its 'maturity level' to execute large complex projects. The experience of two P3 projects, the Gardiner Rehabilitation and the George Street Revitalization, will advance the City's ability to deliver large complex projects and will develop internal capacity for P3 projects.

In consideration of the options examined for procurement and delivery, staff recommend the Design-Build-Finance (DBF) model for the GSR project.

The recommendation reflects staff's best advice to City Council regarding how to move the project forward in the most cost-effective, risk-averse and overall successful manner.

Potential Role for Infrastructure Ontario

Staff recommend that the City initiate negotiations towards an agreement with IO, under which IO could act as a commercial procurement lead for the P3 approach, through to execution of project agreements and financial close. Through these discussions, both parties would consider a scope of services for IO and other third party advisors, the City's role in the delivery of a DBF model, and terms and estimated costs for professional services required to support the P3 delivery model.

City Council has recently approved negotiating and entering into an agreement with IO for the Gardiner Expressway Strategic Rehabilitation Plan. IO has significant experience with the P3 / AFP procurement process, establishing payment mechanisms, and the preparation of project agreements. Furthermore, potential private sector proponents have become familiar with IO, its processes and documents. As a result, there is potential for broader level of interest among potential private partners, which would be beneficial for the GSR project.

Resulting Required Professional Services

At its meeting of March 31, 2016, City Council authorized staff to enter into an extension to the amending agreements with two prime consultants to December 31, 2016. The two consultants for the GSR project are PRISM Partners Inc., providing project management services and Montgomery Sisam Architects (MSA) in association with Hilditch Architect, providing architectural design services. That extension allowed continuation of the project until a procurement model is approved by Council through this report.

This is the first time that the City experiences a transition from the original intention to procure under DBB to now procure under DBF. If Council approves this report, the consultants will continue to work concurrent to staff negotiations with IO. Other third party consultants may also be required. The discussions with IO will help inform a suitable transition process toward DBF as well as the roles and responsibilities of all parties. The current City consultants will support staff through this process. The scope of work until December 31, 2016, as previously approved by City Council, includes continuing with City Planning processes (the City's responsibility) and related stakeholder sessions, and initiating a seamless transition process to DBF (foreseen as a possibility in the report adopted by Council on March 31, 2016).

Over the next 3 to 6 months, the scope of work for all parties will be developed, with ensuing recommendations to City Council.

Next Steps

Staff will report back to Council by December 2016 with a status update on negotiations with Infrastructure Ontario and recommendations, if any, on terms and estimated costs for professional services required to support the P3 procurement, further refined cost estimates, a governance structure, and an updated project schedule.

II. Update on Transition Plan

In November 2015, City Council directed staff to "work with key stakeholders on developing a comprehensive transition plan for clients utilizing established best practices in transitioning vulnerable populations, including, but not restricted to, giving clients choices and involving them in decision making, identifying and offering health and other forms of needed support as early in the process as possible, and re-locating clients in areas with adequate support services".

Based on a DBF procurement method and a potential project start of 2017, the date for the completion of a transition process and having a vacant site at Seaton House is late 2018. This date is subject to revision pending funding approvals for the project as part of the 2017 budget process and further discussions with IO.

To date, there have been a series of consultations held with Seaton House clients and Dixon Hall Schoolhouse clients. Staff have established regular meetings with service partners, such as the Inner City Family Health Team and other health services, and stakeholders including the Toronto Alliance to End Homelessness. Plans are also underway to reconstitute the GSR Stakeholder Advisory Group into a broader Stakeholder Reference Group. The group will reconvene in the fall of 2016. Discussions with the Toronto Central Local Health Integration Network are underway to ensure that health services are delivered and coordinated for vulnerable clients throughout the transition process. A transition plan work group, made up of City staff with community partners, is already underway and will be linked to the Stakeholder Reference Group.

Consultations with client groups reinforced that clients consider housing a primary goal. In keeping with the Housing First approach, clients will participate in developing their transition plans and their choices will be respected and supported. Two hundred (200) housing allowances will be available to support clients with finding and maintaining permanent housing in the community. Seaton House staff, in consultation with service partners, are developing an assessment process for individuals leaving Seaton House in order to ensure that each client has an individualized transition tailored to their needs and that they receive the most appropriate level of support. Coordinated health and other forms of support will be important considerations for all client transition plans.

Habitat Services Partnership

This report recommends that Council authorize the negotiation of an agreement with Habitat Services for the purchase of service of up to 150 units of housing with access to on-site supports. The recommendation aligns with the City's Housing First philosophy and the principles of the transition plan. A recent needs assessment of Seaton House clients indicate that many clients can live in the community, instead of a shelter, if they had supportive housing. SSHA has a long-standing relationship with Habitat Services, and the agency has proven expertise in housing individuals with mental health challenges. Habitat is able to provide a range of housing options and locations across the

city, coupled with supports to clients based on their individual needs. Staff will submit a business case for consideration by the City Manager and Deputy City Manager & CFO as part of the 2017 budget process.

The City's current funding relationship with Habitat Services is cost shared with the Province. Funds required for the 150 units of housing with supports are not cost shared. Recommendation 6 directs the Acting General Manager of SSHA to pursue enhanced funding from the Ministry of Health and Long Term Care to support clients with higher needs be successful in housing.

In collaboration with Real Estate Services and Facilities, SSHA staff are actively seeking four new shelter sites for the transition of Seaton House residents, two for lease and two permanent. While searches continue all across the city, plans call for at least one site to be located in the downtown area for clients who require the support of essential health and other social supports located near and around Seaton House. To date, one site located at 731 Runnymede (Ward 11) has been identified as a potential site for a City-operated shelter for homeless men. A staff report will be before City Council for consideration at the same meeting as this report. If approved and after some renovations, the site is forecast to open in the second quarter of 2017.

New Shelter Models

SSHA is transforming the way it delivers shelter services to people who experience homelessness, using a Housing First approach. The central assumption of the Housing First model is that having a home provides a solid emotional and social foundation which makes it possible to work on other life goals. Housing will be primary focus of the program for the new shelter sites. The program models will be based on best practices in shelter services, will be outcomes focused with links to employment and housing, and will connect clients to the broader community for health services and other supports. The four new shelter sites will deliver a higher quality of service than currently offered at Seaton House simply because the sites will be smaller in size (100-125 beds) and will be structured to optimize the dignity and privacy of clients. Staff will be better able to provide improved programming and housing-focused services.

Decommissioning beds and a bed closure protocol for Seaton House are important elements of the transition. The decommissioning will be sequenced with the opening of beds at the new sites and with clients moving into longer-term accommodation. Throughout this process, SSHA will monitor the impact on occupancy in the men's shelter sector.

Staff will report back in Q2 of 2017 with an update on the transition plan for the clients and staff of Seaton House.

III. Update on Provincial Lands

In November 2015, City Council authorized the Chief Corporate Officer to negotiate with the Province of Ontario for the terms of possible rights to acquire the property and buildings at 311 Jarvis Street and 354 George Street for the construction of affordable housing and other uses.

In February 2016, the City Manager wrote to the Provincial Secretary of the Cabinet, formally expressing the City's interest in acquiring the properties and entering into a partnership with the Province to develop the site for affordable and mixed housing. The City would also explore options with Infrastructure Ontario for those lands. A response indicated that the Province is receptive to participating in a collaborative dialogue with the City regarding the future use of those properties.

The Province is still on track to move their operations to a new site on Chestnut Street in 2022 at which time the provincial properties will be vacant and declared surplus to provincial needs. City staff are following up with the Province.

CONTACTS

Josie Scioli
Chief Corporate Officer

Phone: 416-397-4156
Email: jscioli@toronto.ca

Rob Cressman
General Manager
Shelter, Support & Housing Administration
Phone: 416-392-7885
Email: rcressm@toronto.ca

SIGNATURES

Roberto Rossini
Deputy City Manager &
Chief Financial Officer

Giuliana Carbone
Deputy City Manager

ATTACHMENTS

Attachment 1: Overview of Procurement Models
Attachment 2: Ernst & Young Orenda Corporate Finance Inc. – Executive Summary: Project Procurement, Delivery Options, and Value for Money Analysis Report

Attachment 1: Overview of Procurement Models

Public-Private Partnerships

Public-private partnerships (P3s) are used in much of Canada and other parts of the world to procure large-scale public infrastructure projects as a single project. P3s span a spectrum of models that progressively engage the expertise and/or capital of the private sector. Under a P3 in Canada, asset ownership remains in public hands (i.e. with the asset owner). The construction and delivery, financing, and sometimes the maintenance and operations, are undertaken by the private sector according to specific terms and conditions. These terms and conditions include private sector partner responsibility for delivering a project on time and on budget.

P3s include a spectrum of options that increasingly shifts more responsibility to the bidder, in order to create the conditions for better contract outcomes. As the bidder responsibilities grow, so does the onus on the municipality to have an appropriately thorough contract, and contract administration.

Table 9 below outlines the "long list" procurement options considered by EY, along with a brief description of what each option would entail.

Table 9: Long-list of Project Procurement / Delivery Options

Procurement Model	Description
Design Bid Build	<p>Design-Bid-Build (“DBB”) procurement has been the most common method of infrastructure procurement by the public sector and the most typical method used by the City. Under this traditional approach, the public sector is fully responsible for the design of the asset. These designs are either done in-house or contracted to private design firms. The public sector then invites bids from qualified bidders for the contract works. The bids are reviewed and the contract is awarded to the low bid meeting specifications.</p> <p>During the construction phase, the selected construction contractor enters into a contract to undertake construction of the works under the supervision of an architect/project manager and/or design consultant representing the public sector’s interest. Following the completion of construction, the asset is commissioned and handed over to the public sector for operation and maintenance.</p> <p>This approach is well-suited to projects for which the client can, and has a desire to, specify its exact requirements and therefore seek firm, competitive prices in the market.</p>
Construction Management	<p>Construction management (“CM”) is a professional management practice applied to construction projects from project inception to completion for the purpose of controlling time, cost, scope and quality.</p> <p>The CM delivery method entails a commitment by the construction manager at risk for construction performance to deliver the project within a defined schedule and price, either fixed or a Guaranteed Maximum Price (“GMP”).</p>
Design Build	<p>Design-Build model (“DB”) procurement is a single bid for the integrated design and construction of the project per specification is obtained from qualified bidders. Under a DB method, the bidder develops its detailed design in accordance with a subset of the output specifications and functional program. Following design</p>

Procurement Model	Description
	<p>approval, the selected contractor (or a partnership between a designer and construction contractor) proceeds with construction of the asset. The government sector assumes operation and maintenance responsibilities following completion.</p> <p>Compared with the DBB approach, the DB model combines the design and construction schedules, thus streamlining the procurement process and allowing innovation. For example, this could involve some concurrent design and construction activities to shorten the overall timeline, or on larger projects, modular designs that allow for sequential approval to begin construction on approved components sooner. This approach is well suited to more complicated projects where there is scope for innovation.</p>
Integrated Project Delivery	<p>The integrated project delivery (“IPD”) method attempts to spread the risk, responsibility and liability for project delivery equally among the primary parties – the owner, the designer, and the builder, whether through partnership agreements or multi-party contracts.</p> <p>The basis of IPD is shared risk among all parties, or an aligned relationship rather than an inverse relationship of risk between the owner and contractor.</p>
Build Finance	<p>Under the Build Finance (“BF”) model, the public sector transfers the responsibilities and associated risks for the construction and financing of an asset to the private sector. Upon the satisfactory completion of construction, the public sector makes a single payment, which may be subject to a holdback provision.</p> <p>The BF removes the integration achieved by combining the design and construction elements of a project found in a DBF, but still provides increased incentive for the private sector to complete construction on a timely basis.</p> <p>BF promotes a high degree of stakeholder input, operational readiness and integration as compared to the other models; it is comparable to Design Bid Build in that manner. It eliminates the time spent developing a PSOS and Design Build competition process, creating schedule advantages.</p>
Design Build Finance	<p>Under the Design-Build-Finance (“DBF”) model, the public sector transfers the responsibilities and associated risks for the design, construction and financing of an asset to the private sector. Upon the satisfactory completion of construction, the public sector makes a single payment, which may be subject to a holdback provision.</p> <p>The DBF is an extension of the DB option, but with payments linked to satisfactory completion. This provides increased incentive (compared with a liquidated damages regime) for the private sector to complete construction on a timely basis and ensure that the public sector’s specifications for the asset are met.</p> <p>Stakeholder input and operational readiness and integration is achieved during the development of the Project Specific Output Specs (“PSOS”), the RFP process and the user group consultation process following Financial Close. Stakeholder engagement and design modifications are limited by the contractual obligations of the successful design team to the successful builder.</p>
Design Build Finance Maintain	<p>The Design Build Finance Maintain (“DBFM”) model is an integrated approach that combines a Design Build contract with long-term maintenance under a single contract.</p> <p>A private sector partner is procured through a competitive tendering process to design, finance, build and maintain the infrastructure in a manner that meets the requirements and specifications of the public sector.</p> <p>While some elements of operations may typically be transferred to the private sector under DBFM, these services are typically limited in scope and the operating responsibilities for the asset are retained by the public sector. Furthermore, such</p>

Procurement Model	Description
	<p>transfer of operations would be subject to existing collective agreements and approvals.</p> <p>Stakeholder input and operational readiness and integration is achieved during the development of the PSOS, the RFP process and the user group consultation process following Financial Close. Stakeholder engagement and design modifications are limited by the contractual obligations of the successful design team to the successful builder.</p>
Design Build Finance Operate Maintain	<p>In a Design Build Finance Operate Maintain (“DBFOM”) contract, solicitations are sought for an integrated service to comprise design construction and maintenance of a new facility and long-term operation by the contractor to meet defined specification objectives. DBFOM differs from DBFM in that it transfers greater operational responsibilities and related risks to the private sector.</p>

The shortlisted P3 models for further analysis by EY were the following:

- Build-Finance (BF)
- Design-Build-Finance (DBF)
- Design-Build-Finance-Maintain (DBFM)

The DBB model served EY as the comparative baseline for the three P3 models.