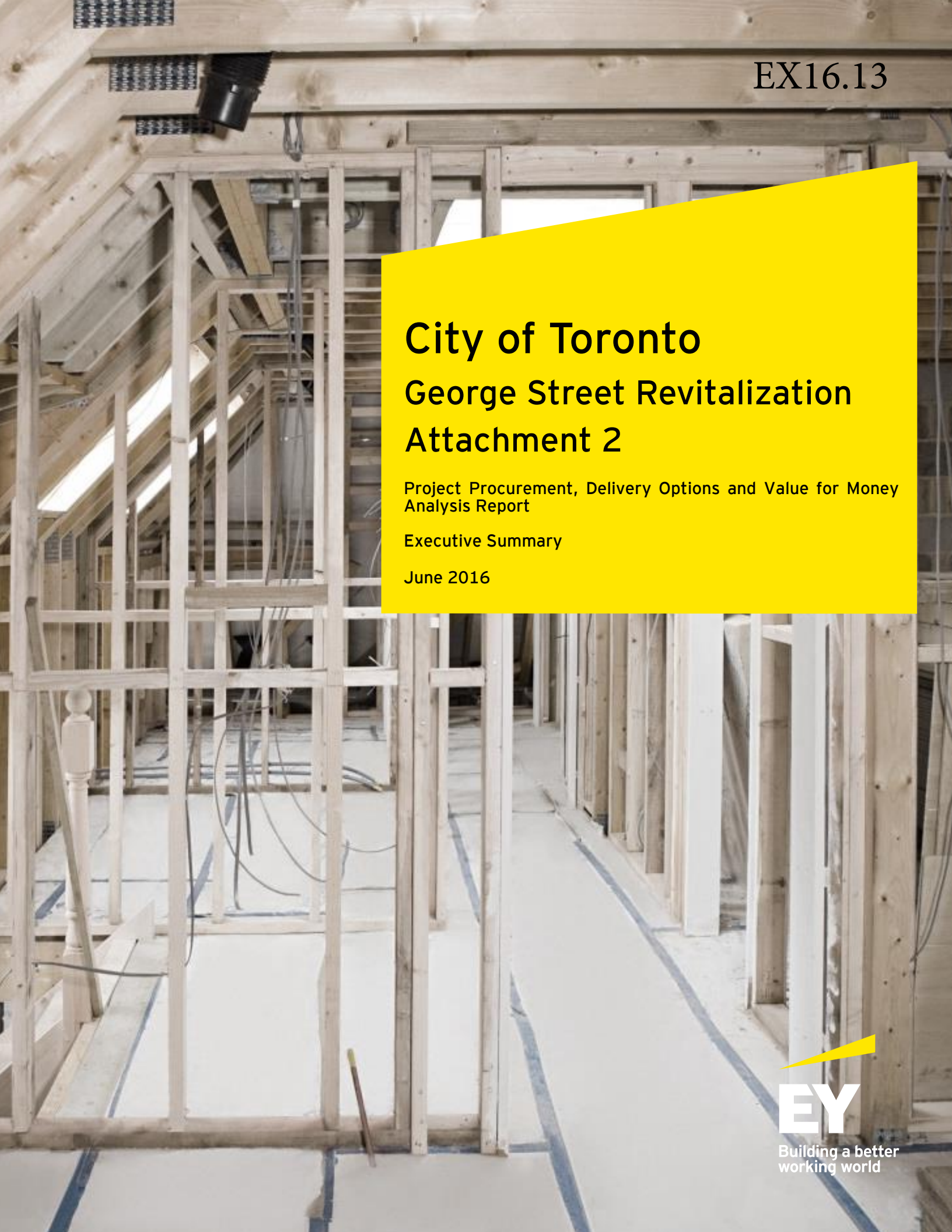
EX16.13



City of Toronto

George Street Revitalization

Attachment 2

Project Procurement, Delivery Options and Value for Money Analysis Report

Executive Summary

June 2016

Building a better working world

Notice

Ernst & Young Orenda Corporate Finance Inc. ("**EY**") was engaged by the City of Toronto (the "**City**") to assist the City's Shelter, Support and Housing Administration Division and its Long-Term Care Homes & Services Division in completing procurement, delivery options, and value for money analysis for the George Street Revitalization Project (the "**Project**"). This report (the "**Report**") highlights the methods, tools and findings of the procurement/delivery options analysis, qualitative analysis (including multi-criteria analysis and market sounding), quantitative analysis (including risk and value for money) and recommendations for the Project.

This Report was prepared on City instructions solely for the purposes of the City. It should not be relied upon for any other purpose. The Report is based on objective analysis and information provided to us by the City and third parties and does not necessarily represent EY view, comments, conclusions and opinions.

The Report may not have considered issues relevant to any third parties. Any use such third parties may choose to make of the Report is entirely at their own risk and we shall have no responsibility whatsoever in relation to any such use and to the fullest extent permitted by law we do not accept or assume responsibility to anyone other than the City for our work, for this report or for the opinions formed.

Our report to the City is based on inquiries of, and discussions with, the City and their consultants. We have not undertaken any form of investigation, audit, substantiation or verification procedures for the information, data and projections provided to us. We have not sought to verify the accuracy of the data or the information and explanations provided.

Our work has been limited in time and a more detailed / lengthy exercise may reveal material issues that this review has not. No obligation is assumed by EY to revise this Report to reflect any circumstances or information that become available subsequent to the date of this Report.

1.0 Executive Summary

Ernst & Young Orenda Corporate Finance Inc. ("**EY**") was engaged by the City of Toronto (the "**City**") to assist the City's Shelter, Support and Housing Administration Division and its Long-Term Care Homes & Services Division in completing procurement, delivery options, and value for money analysis for the George Street Revitalization Project (the "**Project**").

This report (the "**Report**") highlights the methods, tools and findings of the procurement/delivery options analysis, qualitative analysis (including multi-criteria analysis and market sounding) and quantitative analysis (including risk assessment and value for money analysis) for the Project.

1.1 Project Overview

The mandate of the George Street Revitalization Project is to bring about transformational change to George Street neighbourhood and the greater Downtown East via a 600,000 square-foot facility. Upon completion of the Project, George Street will be a welcoming, safe and vibrant neighbourhood offering purpose-built environments that respond to the housing, program and service needs of residents, particularly those who are vulnerable due to experiences with homelessness, social frailty and poor health in later life.

Also referred to as the New George Community, built on the Seaton House site, the Project will be comprised of the following elements:

- Long-Term Care Home;
- Emergency Shelter Program for Men;
- Transitional Living Program for Men and Women;
- Service Hub; and
- Affordable Housing.

1.2 Project Procurement / Delivery Options

In considering the potential range of procurement / delivery options for the Project, the City considered a long-list of procurement options ranging from the traditional Design-Bid-Build model to public-private partnership ("**P3**") integrated models, including:

- Design-Bid-Build ("**DBB**")
- Construction Management ("**CM**")
- Design-Build ("**DB**")
- Integrated Project Delivery ("**IPD**")
- Build-Finance ("**BF**")
- Design-Build-Finance ("**DBF**")
- Design-Build-Finance-Maintain ("**DBFM**")
- Design-Build-Finance-Operate-Maintain ("**DBFOM**")

1.3 Qualitative Analysis

In considering the potential range of procurement / delivery options for the Project, the City considered a long-list of options ranging from the traditional Design-Bid-Build model to P3s. In order to evaluate the long-list of procurement options through a suitable qualitative process, Multi-Criteria Analysis ("**MCA**") was applied to each of the long-listed procurement options.

The objective of the MCA was to consider the key procurement options[1] against developed qualitative assessment criteria (the "**Evaluation Criteria**") in order to determine which procurement options should be short-listed for detailed quantitative analysis.

Weighting of the Evaluation Criteria by relative importance to the City was also applied from one (1) (low priority or less importance to achieving City objectives) to five (5) (high priority or high importance to achieving City objectives).

Each of the Evaluation Criteria was assessed for each procurement option on a scale score between zero (0) and five (5), with the highest score representing a highly effective and efficient delivery solution.

The summary table below shows that the DBFM model emerges as the highest scoring procurement option. The MCA score, combined with feedback from the market sounding process (Section 4) were utilized in shortlisting the long-list of procurement option to the most viable model that was the most aligned with City objectives. For the purposes of this report, the BF model was carried forward as a second alternative delivery model for analysis. Furthermore, the DBB model was also carried forward through quantitative analyses to serve as comparative "baseline"/traditional option for current City procurement/delivery processes.

Table 1: Summary of MCA

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

1.4 Market Sounding

A market sounding exercise was facilitated by EY in order to obtain feedback to assist with the development of an efficient and effective procurement option. A number of potential market participants (the "**Participants**") were invited to provide feedback in this respect with representation from a number of key relevant sectors of the market including:

[1] 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 Construction Management Association of America has noted that "there are only a limited number of projects that have actually employed the multi-party contractual arrangements that IPD proponents use to define IPD as a delivery method". The DBFOM model has also been removed as a potential procurement option given the City's intent to retain control of the programmatic elements for the Project.

- Developers;
- Contractors;
- Equity sponsors and financial investors;
- Long-Term Care operators;
- Non-profit Long-Term Care operators;
- Emergency Shelter Providers;
- Community Hubs;
- Operation and maintenance providers; and
- Financial institutions.

Participants expressed a high level of interest in delivering the Project as under a P3 model. Most Participants considered the scope to be more than sufficient to pursue a DBFM delivery model, noting that operations would be best provided by the City, due to the disparate nature of the planned programs/services and the resulting need for a variety of specialist operators.

Participants stressed the importance of ensuring that necessary approvals and due diligence are completed prior to the procurement period. In particular, Participants noted that it would be necessary to obtain Council approval on the procurement model prior to procurement start to eliminate any uncertainty that might impact market interest in the Project. Participants noted that the unique features of the Project along with the complexity of services offered and the inclusion of heritage component requires careful planning and consideration by the City to obtain signoffs and approvals which can ultimately delay the Project timeline. Overall, the Project was considered to be a very attractive opportunity for most Participants.

1.5 Quantitative Analysis

A value-for-money ("**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.

The shortlisted procurement models carried forward for an initial quantitative analysis included DBB, BF, and DBFM. Following the initial analysis, the City requested the inclusion of the DBF procurement option in the shortlist for further quantitative analysis.

The VFM analysis involved a detailed quantitative assessment of the four (4) shortlisted procurement options, DBB, BF, DBF and DBFM, with the objective to assess whether the BF, DBF and/or DBFM procurement models will achieve greater VFM to the public as compared to the DBB procurement model.

For this Project, three (3) separate financial models were developed. The first financial model ("**BF model**") was used to assess VFM by comparing the DBB delivery to the BF delivery options. The second financial model ("**DBF model**") was used to assess VFM by comparing the DBB delivery to the DBF delivery options. The third financial model ("**DBFM model**") was used to assess VFM by comparing the DBB including a long term maintenance period[2] to the DBFM delivery options.

[2] Typically, procurement processes for traditional (DBB) projects involve separate contracts for the design, construction and long-term maintenance components.

The quantitative analysis was developed based on an estimated 45 month construction period (as provided by Hanscomb). In quantifying the costs associated with the shortlisted 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 City's Consultant Team (Owner's Technical Consultants), City Managers and Directors, and the City's appointed Project Executive Committee. Once the identified risks had been quantified, their value (i.e. the expected cost of these risks) was incorporated into the project cash flows in order to compare the procurement models on a risk-adjusted basis.

Table 2: BF Expected Value of Risk

BF Expected Value of Risk	
($M)	**DBB**
Risks during Construction	199.8*
	BF
Risks during Construction	153.5

*Based on 1.5% short-term discount rate to align with the discount rate used in the BF analysis

Table 3: DBF Expected Value of Risk

DBF Expected Value of Risk	
($M)	**DBB**
Risks during Construction	199.9*
	DBF
Risks during Construction	155.6

*Based on 1.5% short-term discount rate to align with the discount rate used in the DBF analysis

Table 4: DBFM Expected Value of Risk

DBFM Expected Value of Risk	
($M)	**DBB**
Risks during Construction	247‡
Risks during Maintenance Period	61
Total	**308**
	DBFM
Risks during Construction	108
Risks during Maintenance Period	13
Total	**122**

‡Based on 3.5% long-term discount rate to align with the discount rate used in the DBFM analysis

The VFM analysis yielded the following results:

Table 5: 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%**

Figure 1: VFM Analysis Results - DBB vs. BF

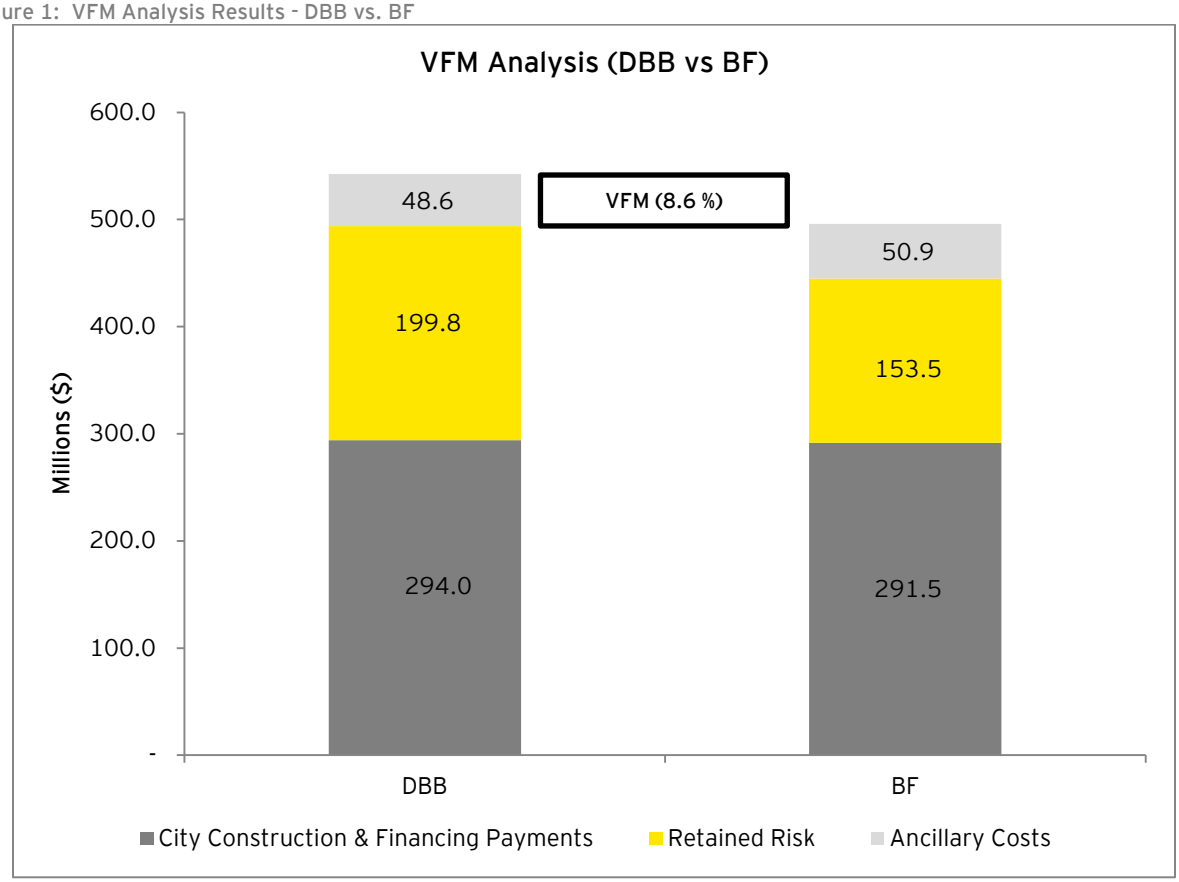


Table 6: Base Case Comparative Value for Money Results (DBF model)

Base Case Comparative Value for Money Results		
Base Case Value for Money Results ($M)	DBB	DBF
Total Cost	542.6	498.8
Estimated Value for Money (cost difference)		$43.9
Estimated Value for Money (% difference)		8.1%

Figure 2: VFM Analysis – DBB vs. DBF

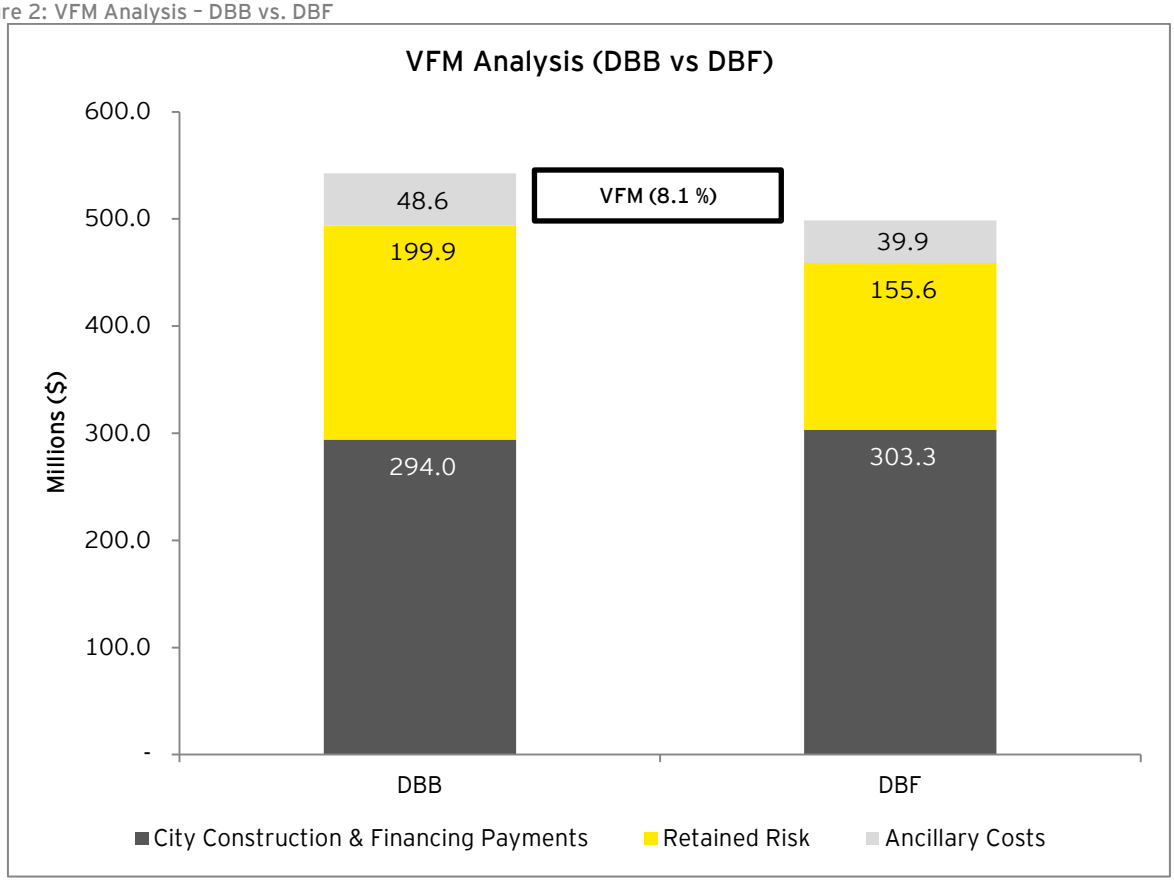
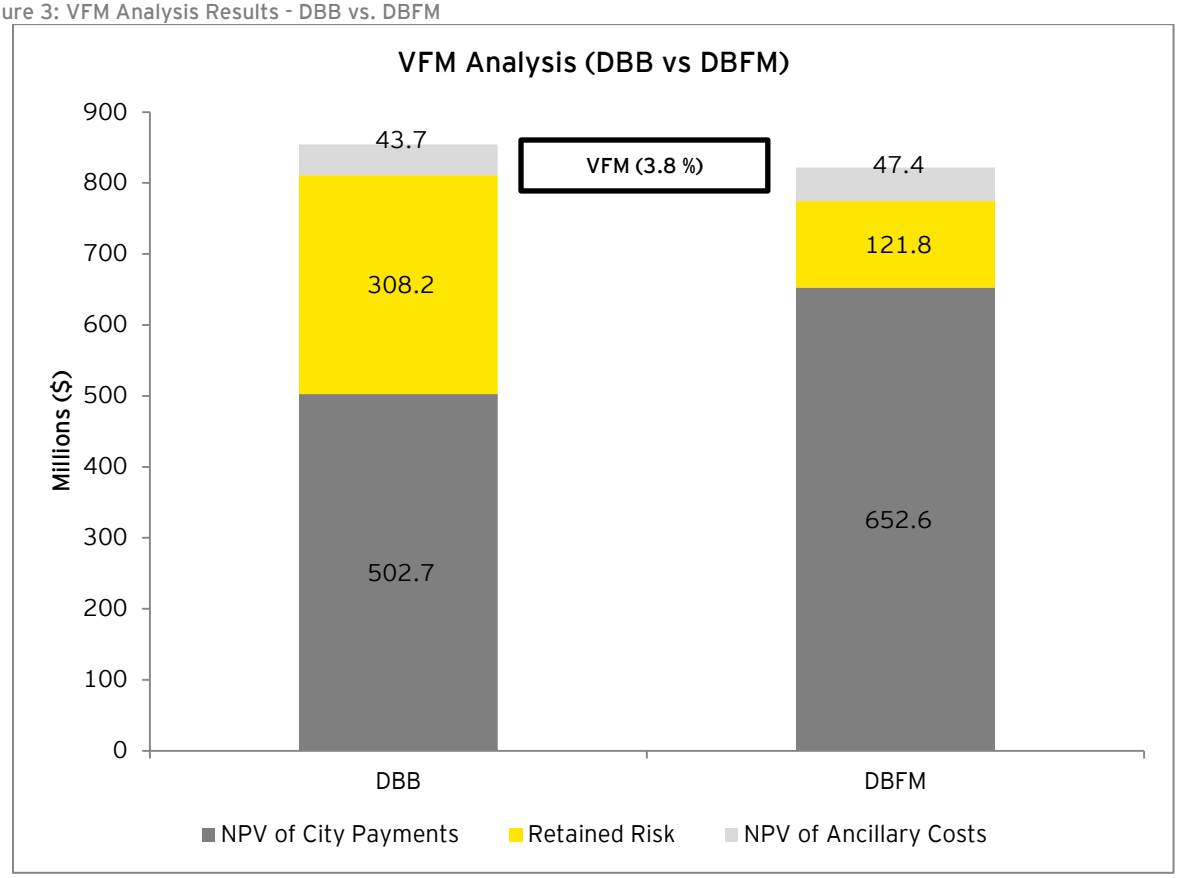


Table 7: Base Case Comparative VFM Results (DBFM Model)

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%**

Figure 3: VFM Analysis Results - DBB vs. DBFM



The quantitative analyses found that the BF, DBF and DBFM models (at net present value ("**NPV**")) produced considerable VFM as compared to the traditional DBB delivery option. However, 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 Project finance procurement 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. All options considered should be thoroughly tested for VFM, while taking careful consideration of the defining characteristics of the delivery option.

1.6 Integrated Findings and Next Steps

In reviewing the procurement options available to the City, the qualitative analyses combined with the detailed quantitative analyses carried out on the short-listed procurement options yielded comparable positive results for the shortlisted BF, DBF and DBFM models.

In considering next steps for the selection of the optimal procurement option to be applied in Project delivery, the City may wish to consider the following:

- The City's limited experience in the application of P3 models for large infrastructure projects;
- Overall Project delivery timeline under the various procurement processes;
- Transfer of current Seaton House residents to temporary facilities for the duration of Project demolition and construction; and

The relative advantages and disadvantages to the City in the selection of a delivery option over another, including planning and scheduling, risk transfer, and flexibility and control of Project elements.

Ernst & Young
Assurance | Tax | Transactions | Advisory

About Ernst & Young
Ernst & Young is a global leader in assurance, tax, transaction and advisory services. Worldwide, our 167,000 people are united by our shared values and an unwavering commitment to quality. We make a difference by helping our people, our clients and our wider communities achieve their potential.

Ernst & Young refers to the global organization of member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit www.ey.com.