



GOVERNMENT OF BERMUDA

L.F. Wade Airport Redevelopment Project

Overall Business Case - Entrustment Report

November 17, 2016

**Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda**

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INTRODUCTION

The L.F. Wade International Airport ("the Airport") is in need of major repair and rehabilitation. After careful consideration of various project and delivery options, the Government of Bermuda ("the Government") decided to undertake a major redevelopment of the airport ("the Airport Redevelopment Project" or "the Project") using a public/private partnership ("P3") approach. Under the selected approach, the Government proposes to contract with the Canadian Commercial Corporation ("CCC"), a Crown Corporation of the Government of Canada acting as prime contractor in the Project while partnering with private Canadian contractor Aecon Group Inc. and its affiliates ("Aecon"). Aecon, through a Special Purpose Company ("SPC", known in this case as "Project Co") created for the Project, would then construct, operate and maintain the Airport under a 30-year Design-Build-Finance-Operate-Maintain ("DBFOM") concession structure. Over the concession term, airport operations will be overseen by a Quasi-Autonomous Non-Government Organization ("Quango") named the Bermuda Airport Authority ("BAA").

The constitutional authorization and delegation from the U.K. Government to the Government of Bermuda to enter into a contract with CCC, was provided by an entrustment letter ("Letter") that was issued by the Foreign & Commonwealth Office ("FCO") of the U.K. Government. A key goal for both the Bermuda and U.K. Governments is that the Project deliver value for money and benefits for all Bermudians. The U.K. Government, through Her Majesty's Treasury has developed guidance for public sector bodies on how to appraise proposals before committing funds to a project (or policy or programme) in the form of the Green Book. Under the Green Book guidance, a Full Business Case ("FBC") is recommended prior to the contracting stage of a project.

In an effort to ensure Value for Money, the Government and U.K. Government jointly retained the independent consultancy firm, Deloitte Ltd., to review the Project Concept, a precursor to an FBC, with reference to the Green Book in early 2015. Although under no legal obligation to follow the Green Book, the Government is striving to meet its requirement to ensure value for money and project transparency. The Deloitte report mapped the Project's documentation at the time to the Green Book's "Five Case" model and performed a gap analysis on the methodologies for development of each case: Strategic, Economic, Commercial, Financial and Management. The Deloitte report identified various deficiencies to be addressed by the Government based on the information available at that time.

In the FCO's Letter to the Government dated July 17th, 2015, the U.K. Government delegated authority to the Government to enter into a contract with CCC, subject to paragraphs 6 and 7 of that letter. Paragraph 6 of the entrustment letter is reproduced below:

6 a) The cost of the construction of the airport must be wholly borne by CCC and the selected developer and sub-contractors. No debt should appear on the balance sheet of the Government of Bermuda that relates to the airport construction.

6(b) The United Kingdom Government and the Government of Bermuda must agree on what measures are required to address the deficiencies that are identified by Deloitte in their assessment report(s).

6(c) The Government of Bermuda must publish a written and evidence-based assurance that the required measures have been taken, before the Contract can be concluded.

Since the receipt of the Letter, the Government has worked with and agreed with the FCO on the reports to be prepared by the Government to meet paragraph 6 of the entrustment letter (collectively "the Entrustment Report"). This agreement set out the gaps to be addressed in terms of the "five cases" noted above and an Overall Business Case. The objective of this Entrustment Report is to provide a comprehensive document that addresses all gaps covering Value for Money, Cost-Risk/Benefit, Cost/Funding, Social Benefits and

Market Benchmarking in a cohesive manner. The organization of this Report is aligned with the “five cases”. The five sections of this report are as follows:

- Section 1, Strategic Case – demonstrates that the Project is supported by a robust case for change that includes social benefits;
- Section 2, Economic Case – details the project’s critical success factors and describes the options analysis undertaken by the Government to assess the cost vs. risk/benefit proposition;
- Section 3, Commercial Case – shows that the Project is commercially viable, assesses Value for Money, and benchmark it against similar projects;
- Section 4, Financial Case – outlines the Government's view that the Project is financially affordable by assessing the cost vs. funding proposition;
- Section 5, Management Case – provides evidence that the Project can be delivered successfully by ensuring the risks are managed benefits realized.

The cases presented in the main body of this Report are supported by a series of 13 appendices that provide additional detail on each case. These 13 appendices are:

1. Appendix 1 – Strategic Overview
2. Appendix 2 – Critical Success Factors
3. Appendix 3 – Options Analysis
4. Appendix 4 – Optimism Bias
5. Appendix 5 – Procurement Strategy
6. Appendix 6 – Negotiation Approach
7. Appendix 7 – Value for Money Assessment (undertaken by separate independent consultant)
8. Appendix 8 – Financial Analytical Tools
9. Appendix 9 – Budgetary Impact
10. Appendix 10 – Accounting and Balance Sheet Impact
11. Appendix 11 – Program and Contract Management
12. Appendix 12 – Contingency Plan
13. Appendix 13 – Regulatory Framework

This Report reflects the views of the Government and is prepared by the Government with assistance from its legal, financial, operational, technical, and project management advisors. Given the significance of achieving value for money, the Government has engaged an independent consultant to undertake the Value for Money Assessment (“VFM Assessment”). The report of the independent VFM Assessment consultant is provided in **Appendix 7**.

SECTION 1: STRATEGIC CASE

The strategic case establishes the case for change and strategic rationale of the Project. It explains the objectives that are aiming to be achieved, their strategic context and the fit with both the Airport's corporate plan and the Government's wider public policy objectives.

The Government currently owns and operates the Airport through the Department of Airport Operations ("DAO") which is part of the Ministry of Tourism, Development and Transport. The Airport is the only airport on the island and plays a key role in connecting Bermuda to the rest of the world. It is the primary method of transportation for tourism and international business, which are two industries core to the Bermuda economy.

Based on the Airport's 2013 3-Year Strategic Plan, its overarching business strategy consists of four main objectives:

- Working towards International Civil Aviation Organization ("ICAO") Category 1 Airport Status
- Planning and initiating mission critical capital projects
- Identifying and securing new revenue streams
- Working towards energy self-sustainability

Spending Objectives, Existing Arrangements, and Business Needs

The Airport currently spans 216 hectares of land, features a 2,961-metre air carrier runway, a taxiway system connecting the runway with various parts of the Airport, a passenger terminal, cargo facility, executive facility, and various support facilities. The Airport can support aircraft of all sizes up to and including the Airbus A380. The Airport is currently served by Air Canada, American Airlines, British Airways, United, Delta Airlines, JetBlue, and WestJet, and offers service to fourteen destinations in the U.S., Canada, and Europe, including travel hubs such as London, New York, Miami and Toronto.

In addition to DAO's long-term strategic planning, there are more immediate issues that drive the Department's spending objectives. The current airport terminal infrastructure is outdated and many critical components of the building are in need of repair. In the process of remedying the structural problems of the existing terminal, the solution will need to take into consideration the following strategic objectives.

- Increasing efficiencies, capacity, and safety of airport operations
- Stimulating the economy through investing in critical national infrastructure
- Building the brand value of Bermuda

The Government is aware of several deficiencies at the Airport that need to be resolved to ensure the safety and improvement of its operations. In addition to the status quo, changes will be needed to ensure the sustainable long-term operations of the Airport. Specifically, the Government identified the following gaps and priorities as business needs as a part of the Project:

- Addressing structural needs of the airport terminal
- Improving customer experience
- Increasing traffic volume and revenue

Business Scope and Key Service Requirements

Understanding the strategic context and existing business needs, the scope of the redevelopment project is focused around the needs of the Airport and the limitation in the Government's resources. This scope was defined early on in the development process to ensure the Project's strategic fit, affordability, and achievability. The scope of the Project was used to drive the options that were considered as potential development methods for the Airport's redevelopment.

The key scope factors considered in developing potential options were:

- No new land is available to redevelop the Airport
- There is no expected significant surge in tourism traffic
- The redeveloped Airport will need to comply with ICAO Category 1 requirements
- There will not be a significant increase in partner airlines and destinations
- There will not be any major changes with the Government's existing relationship with US Customs and Border Protection

Details of the resultant service specifications and requirements of the redeveloped terminal can be found in **Appendix 1 – Strategic Case**.

Expected Benefits and Impacts of the Project

Benefits

- **Tourism** - Significant investment in the Airport's infrastructure should provide long-term benefits and returns in terms of capacity, traffic and tourism growth. It provides the country with a selling point to broaden their efforts to draw attention to Bermuda and underscores Bermuda's first class brand image.
- **Operating Efficiencies** - A redevelopment of the Airport will help remediate various inefficiencies and structural deficiencies of the current airport to improve the layout, operating efficiency and effectiveness at the airport.
- **Jobs** - A large-scale capital project such as the redevelopment of an airport has the potential to create a significant number of jobs and training in Bermuda. The local workforce will be utilized to the extent possible and supplemented with offshore workforce. There will be longer-term job creation through the use of local sub-contractors and workforce to support operations and maintenance of the new terminal. Under the proposed P3 approach, Project Co will give priority to employing local Bermuda labour and businesses. Key aspects of the approach that encourage local employment are:
 - All Department of Airport Operations employees have received Project Co employment offers. Project Co is obligated to provide employment offers, which on the whole, are no less favourable than current employment terms. If employees fail to accept Project Co or BAA employment offers then the Government will retain these employees and the associated employment cost.
 - Airport operations employment across Project Co and the BAA is expected to increase 50% over current staffing levels at the Department of Airport Operations.
 - Aecon Construction is required to maximize the use of Bermuda-based companies and labour in the construction of the new airport terminal, with approximately 60% of the 400 plus construction jobs expected to be filled by Bermudian labour.
 - Aecon will invest in an internship program to provide six-month internships for seven Bermudian construction profession (e.g., engineers and architects) graduates with the opportunity for employment during the Construction Phase following successful completion of the internship.

Impacts of the Project

The Government has provided information on the Project through stakeholder and public meetings. Information has also been posted on the Government of Bermuda website.

Key impacts of the Project have been outlined in the Project Fact Sheet as follows:

- It will substantially improve a strategic Bermudian asset
- It will create hundreds of jobs in the near future to build a new terminal
- It will increase long term employment for Bermudians at the Airport once the Project is completed
- It will provide a far better and safer working environment for Bermudians employed at the Airport
- It will mean a more comfortable, safer and pleasant travelling experience for residents and visitors
- It will stimulate economic growth in Bermuda without further encumbering the debt burden of the Government
- The CCC – a 100% Canadian Government owned entity – will guarantee the delivery of a state-of-the-art terminal building on-spec, on-time and on-budget
- Travelers will no longer be wind-blown and rain-swept walking to and from the aircraft during inclement weather
- Travelers with mobility and other limitations – including the elderly and disabled – will have far improved accessibility to airport amenities and boarding
- The investment in the new terminal and life cycle maintenance will eliminate the need for continuing expenditure on the repair and maintenance of the existing terminal simply to keep it operational
- Improve the resilience of the airport to withstand major storms and avoid expensive and disruptive repairs required following major weather incidents as a result of the existing terminal being situated below sea level

Summary

Bermuda can be, and has been, cut off from the world due to the vulnerability of the Airport's terminal to severe weather due to its location. The terminal infrastructure is in poor condition and has exceeded its useful life. Bermuda's regional competitors are building new airport infrastructure. Redeveloping the Airport will have significant social impact, by stimulating the economy, creating jobs for Bermudians, and delivering a world-class airport terminal of which Bermudians can be proud.

SECTION 2: ECONOMIC CASE

The Economic Case is core to the business case, in that it examines the economic costs and benefits of the Project to Bermuda society as a whole throughout the lifecycle of the Project. Developing the economic case involved defining the critical success factors (“CSFs”) against which options were judged, and then completing a comparative options analysis. The output of the options analysis was both a qualitative assessment of the advantages and disadvantages of each option, as well as a quantitative evaluation of the Net Present Value (“NPV”) of each option over its lifecycle. As per the Green Book, consideration for optimism bias is also included, which is directly linked to the maturity of the risk management of the Project.

Critical Success Factors

CSFs are attributes that are essential to the successful delivery of the Project and acted as a basis to assess the potential options. What follows is an overview of the CSFs for the Project, and the related actions that should be taken to ensure achievement of these success factors. The CSFs identified are crucial, and have been set at a high level to ensure that important options are not excluded from future analysis. These factors are as follows:

- Strategic business fit;
- Government affordability;
- Government achievability; and
- Value for money.

Further details of each critical success factor can be found in **Appendix 2 – Critical Success Factors**.

Strategic Business Fit

To proceed with any proposed option, the option had to align with the strategic business fit of the Government and the DAO, considering the DAO’s spending objectives, existing arrangements, business needs, and service requirements. The current terminal has ongoing problems that have arisen due to aging equipment and infrastructure. Significant capital spending would be required to renovate the current terminal and improve the operational efficiency, flexibility, and the visual appeal of the terminal.

Value for Money

Value for money analysis is an economic comparison that includes the quantitative and qualitative analysis of a proposed deal and a public sector comparator. In addition to an NPV calculation that is inherent to the analysis, qualitative benefits and risks to both the organization and wider society were also considered. An essential component of the value for money analysis is the optimal allocation of risk between the procuring authority and the service provider.

Government Achievability

Achievability is a critical consideration, as the inability to manage and deliver the Project would waste significant amounts of taxpayer money. The two components of achievability are setting realistic targets and ensuring availability of resources to achieve those targets. The Government has solicited the help of external advisors to set realistic Project timelines and ensure the Government achieves its objectives and obligations. The Government has identified and evaluated a wide range of realistic and achievable project options to determine the most well suited option given the Government’s resource constraints.

Government Affordability

In order for the Project to be successful, the option selected must be affordable. In this case, affordability relates to the capacity for the Government to fund the life cycle cost of the Project given its existing fiscal obligations. It was a key objective of the Government to deliver the Project without incurring additional debt.

The assessment of affordability was performed iteratively throughout the selection of the development options, and once the final option was chosen. Affordability has been assessed with the help of various financial and budgetary impact analyses discussed later in this report. These options included various innovative partnerships with the private sector to improve the affordability of the Project.

Project Options Analysis

This section provides an overview of the Government's review, consideration and assessment of the various internal and commercial options to address the Government's public policy objectives in delivering the Project. A detailed list of the Government's public policy objectives and detailed quantitative and qualitative (risks and benefits) analysis of each of the options considered can be found in **Appendix 3 – Options Analysis**.

In order to ensure Project objectives are met, it was important that the business case contemplated a sufficiently wide number of alternatives to delivering the Project. This list included a status quo (or do-nothing) option as a baseline with which to compare all the alternatives. In the case of redeveloping the Airport, the 10 options reviewed in the options analysis were grouped into three categories: 1) Internal 2) External and 3) External Privatized. The first two categories assumed the Government retaining ownership of the Airport, while the third does not. This analysis was formulated based on the professional advice of the Government's external advisors.

Tabled below are the options analyzed as a part of the review:

Option Name	Option Details	Upfront Capital Costs (\$ millions)
Internal Option A-I: Maintain the Airport at Current Levels	This is the alternative of merely maintaining the most urgent repairs and safety considerations, and the avoidance of capital expenditure unless urgently required for safety or legal compliance. This is the "status quo" option.	\$184
Internal Option A-II: Varying Degrees of Capital Renovation	As in the prior alternative, but with a program for distinct strategic investments in individual infrastructure components over a prolonged timeframe.	\$416
Internal Option A-III: Entire Airport Renovation Staged In Phases	As in the prior alternative, but the program for renovation would constitute a staged wholesale replacement over a prolonged schedule.	\$693
External Option B-I: Government Rebuilds Airport	Government designs and builds the Airport at its cost and expense. Government retains a private sector "facility/operations" management enterprise to operate the Airport as a fee-paying lease	\$575

Option Name	Option Details	Upfront Capital Costs (\$ millions)
at its Expense and Outsources Facility Operations and Management	for a fixed term. All standards, risk allocations, scope of service (etc.) is governed by the Airport Operations Service Agreement.	
External Option B-II: Design Build Finance Operate Maintain (DBFOM)	<p>Single private sector enterprise is retained on a "turn-key" basis to undertake all aspects of the Airport's revitalization, including operation for typical 25 to 35-year period. Government maintains control over operation quality via a comprehensive contract and regulatory interface.</p> <p>Two variations have been considered under this alternative: Competitive Tender and government-to-government ("G2G").</p> <p>*This figure (at right) represents capital expenditures under G2G of \$256m and including inflation, contingency costs, builder's insurance and demolition costs. No estimate on capital cost under Competitive Tender was made.</p>	\$303*
External Option B-III: Design Build Operate (DBO)	Same as DBFOM but the Government must finance the capital construction costs of the project. Much like multinational corporations that outsource the development of large infrastructure (large data centres resorts, factories) which they must pay to create and operate with both revenue risk and profit ownership.	\$575

Option Name	Option Details	Upfront Capital Costs (\$ millions)
External Options B-IV: Design Build (DB)	Private sector designs and builds a facility that is financed by Government, but unlike A-III, that one project is not phased over time. The private sector must deliver the facility "on time, on spec, on budget" as a single point of liability for the creation of the facility exactly as bid. Private sector Facility Management Services are outside of the scope of a DB transaction.	\$575
External Option B-V: Construction Procurement; Facility Management Fee for Service	Design/build or traditional design/bid/build procurement required for construction, but also includes an invitation for the builder to collaboratively team with a Facility Management Service Provider to operate the Airport on a fee for service basis (airport revenues belong to the Government, and a service fee is paid by Government to the facility management service provider).	\$575
External Option C-I: Private Sector Alone	Government sells the land, transfers all business assets and personnel to purchaser. Purchaser agrees to contracted standards of "best practices" and subject to ongoing Government control through a statutory regime of highly regulated oversight and governance. There is no reversion to public sector, and all risk of business transfers, e.g. British Post, to the private sector. Government's remaining risk is the impact of airport performance on the economy/reputation.	n/a*

*Note: Although the capital costs would likely be similar to Option B-III for Option C-I, the complexities of risk transfer and retention in a privatization would be difficult to quantify. Therefore, detailed cost analysis was not carried out for option C-1.

From a quantitative perspective, the analysis (as seen in the table below) indicated that Option A-I had the best NPV, at a cost of \$283 million. The next best performing option was B-II(ii), a government-to-government DBFOM, at a cost of \$317 million.

Option Name	NPV (\$ millions)
Internal Option A-I: Maintain the Airport at Current Levels	(283)
Internal Option A-II: Varying Degrees of Capital Renovation	(759)
Internal Option A-III: Entire Airport Renovation Staged In Phases	(838)
External Option B-I: Government Rebuilds Airport at its Expense and Outsources Facility Operations and Management	(953)
External Option B-II: Design Build Finance Operate	
(i) Public tender	(393)
(ii) Government-to-government (G2G)	(317)
External Option B-III: Design Build Operate (DBO)	(1,001)

External Options B-IV: Design Build (DB)	(797)
External Option B-V: Construction Procurement; Facility Management Fee for Service	(675)
External Option C-I: Private Sector Alone	(393)

Although it may have performed best from a quantitative perspective, it was clear from a qualitative perspective that it would be unrealistic to contemplate Option A-I, the status quo. Doing so would mean continuing to keep the existing terminal in operation by spending as little money as possible on maintenance and capital investment. Continuing to operate the existing terminal exposes Bermuda to the risk of a major operational failure of its critical transportation infrastructure, which cannot be accurately quantified. Additionally, the status quo does not support the Government's strategic objectives of increasing tourism and maintaining its international reputation as an international financial center.

Given the importance of these objectives, the analysis showed that next to the status quo, the option that would properly address the Project objectives while still representing the lowest cost would be Option B-II(ii), with an NPV cost of \$317 million, as detailed below.

Financial Analysis – Design Build Finance Operate Maintain Option (government-to-government)

Illustrative Net Present Value Analysis – DBFOM government-to-government (\$ millions)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2046
Cash Inflows										
Incr. Hotel Accommodation Tax	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Net Cash Inflows	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Cash Outflows										
Retained Government Services	(9.0)	(9.2)	(9.3)	(9.5)	(9.7)	(9.9)	(10.1)	(10.3)	(10.5)	(15.9)
BAA Operating Costs	(3.6)	(3.6)	(3.7)	(3.8)	(3.9)	(3.9)	(4.0)	(4.1)	(4.2)	(6.3)
Tax Concessions	(50.0)	-	-	-	-	-	-	-	-	-
Energy Subsidy	(2.7)	(2.7)	(2.8)	(2.8)	(2.9)	(2.9)	(3.0)	(3.0)	(3.1)	-
Net Cash Outflows	(65.2)	(15.5)	(15.8)	(16.1)	(16.5)	(16.8)	(17.1)	(17.5)	(17.8)	(22.3)
Net Cash Flows	(64.4)	(14.3)	(14.4)	(14.6)	(14.7)	(14.8)	(14.9)	(15.1)	(15.2)	(18.2)

Total Undiscounted Cash Flows	(567)
Net Present Value	(317)

Key Assumptions:

Cash Flow Item	Description
Incremental Hotel Tax Revenue (+)	- With an experienced airport operator, the Government would earn additional tax revenues from tourists compared to the scenario where the Government continued to operate the airport. Specifically, passenger traffic would be higher with a private entity operating the airport which will lead to higher accommodation tax revenues compared to the status quo
Retained Government Services (-)	- The Government would be required to pay for certain airport operating expenses (i.e. ATC, meteorological, ground electronics, ARFF) under this option. This has been estimated at \$8.8 million per year escalated by inflation
BAA Annual Costs (-)	- The Government would be required to set up a BAA to regulate the operations of Project Co. The cost of the BAA has been estimated at \$3.5 million per year escalated by inflation
Tax Concessions (-)	- The Government has granted several tax concessions to Project Co. The value of these concessions has been estimated at \$50 million and have been presented at the beginning of the Project
Energy Subsidy (-)	- The Government would be required to pay for annual energy costs for the airport under this option. This has been estimated at \$2.6 million per year escalated by inflation

Expanding on Option B-II(ii) the following innovative transaction structure (only summarily described herein) was formulated:

- Canada is the only G20 Government in the world that will provide public sector purchasers of goods and service from Canada (AAA credit rating) with a contractual guarantee for the construction and delivery of a new airport terminal “on time, on spec, and fixed cost budget”.
- Government of Canada, through the CCC, will partner with Canada’s largest publicly traded (and regulated) construction and concession enterprise to design, build and operate the airport.
- The existing terminal will be expeditiously renovated to address immediate environmental, health, safety and hazardous condition compliance matters.
- All of the above noted public policy objectives will be achieved as an inherent part of the governing contractual arrangements, including stipulations to maximize the use of Bermudian labour for both the construction and operations phases of the Project.
- The financial model will avoid capital expenditures by the Government to build the airport, and will require the private sector to build the airport at its cost and expense by recouping those costs over a thirty (30) year concession term.
- The performance and delivery of airport management and operations services will be governed and overseen by a dedicated regulatory authority on behalf of the Government, and that authority will have both statutory and contractual remedial rights to promote the prudent and compliant operation of the airport and its operations.
- Upon any failure of the Project, the Government will have appropriate “step-in” rights to take over full possession and control of the airport.

Optimism Bias

In project assessments, there is a demonstrated and systematic tendency for project appraisers to be overly optimistic and to understate timing and costs. The Project is a complex project with certain unique features that requires significant resources and expertise to implement successfully. However, the Government does not have a strong track record in delivering projects on time and on budget. The effect of under-estimation of costs, especially under a Government-delivery approach should be noted.

An analysis was conducted to estimate the upper bound cost exposure to the Government for the upfront capital projects under each option considered. Details of the analysis are provided in **Appendix 4 – Optimism Bias**. Highlight of results are summarized below:

Option	Cost Exposure to Government (\$ millions)
A-I. Maintain airport at current levels	\$61
A-II. Varying degrees of capital renovation	\$150
A-III. Entire airport renovation staged in phases	\$284
B-I. Government rebuilds airport at its expense and outsources facility O&M	\$247
B-II. Design Build Finance Operate (G2G)	\$30
B-III. Design Build Operate	\$103
B-IV. Design Build	\$103
B-V. Construction procurement: Facility management fee for service	\$86
C-I. Privatization	n/a

It is noted that if the Government delivers the capital projects by itself (A-I to AIII and B-I) the cost exposure to the Government can be significant. Risk exposure can be significantly reduced through risk mitigation and risk transfer to the private sector partner who has the expertise and experience to manage the risks.

Summary

Various internal and commercial options have been considered by the Government to address the Government's public policy objectives associated with airport infrastructure renewal. The options have been analyzed from both qualitative (risks and benefits) and quantitative (net present value cost and risk exposure to the Government) perspectives.

Overall the DBFOM government-to-government option is considered to be in the national interest and provide best value to the Government. This option does not require the Government to incur sovereign debt and has the lowest cost and risk exposure to the Government, while delivering a world-class airport terminal to Bermuda.

SECTION 3: COMMERCIAL CASE

In order for a project to be successful, it must be commercially viable. This Commercial Case addresses whether or not the Project can be effectively delivered through a workable commercial deal. The Options Analysis described in the previous section provided the analysis supporting the selected approach. This section builds upon the DBFOM government-to-government option, detailing the procurement strategy, negotiation approach and the value for money analysis between the commercial deal and the public sector comparator.

Procurement Strategy

The procurement strategy outlines the Government's considerations, requirements, and its commercial case, for its selection of a suitable P3 alliance partner to formulate and structure a customized "design, build, finance, operate and maintain" P3 that would satisfy the highly unique and challenging financial and economic challenges associated with Bermuda's Airport redevelopment. A more detailed description can be found in **Appendix 5 – Procurement Strategy**.

Successive Governments have considered the concept of P3 previously, including a new L.F. Wade International Airport as a part of a scan of potential projects in 2008. One component of the current Government's strategy to changing the trajectory of deficits and debt over the medium-term is to restrict capital budget outlays within the range of \$55 - \$65 million. In an effort to ensure that the provision of goods and services and that much needed infrastructure improvements do not over-burden the taxpayer or jeopardize Government's debt position, it is incumbent on the Government of Bermuda to explore alternative means of procuring and funding such needed capital expenditure.

The Government decided that any major construction project had to be driven by certain criteria objectives as follows:

- Minimize the impact on an already over extended Government balance sheet.
- Reduce and/or eliminate the real risk of overruns and delays and heavy procurement costs.
- Address the urgency of job creation by reducing the time spent on procurement.
- Must ensure Government achieves Value for Money

With recurring deficits, the legislative debt ceiling falls short of the required capital investment to complete the airport. As such, the Government decided to explore the use of alternative delivery means such as a P3 in order to help address the Government's infrastructure requirements.

For the Airport, the Government formulated various objectives, considerations, requirements and limitations to guide the selection of its P3 partner. In 2008, the Government preliminarily determined that it may have to borrow as much as \$575 million to finance the construction of a new terminal (per the 2008 project plan) unless it found a P3 partner willing to assume the entire cost of the Airport's terminal construction, operation and maintenance, without the Government providing any investment guarantees.

Selection Process

P3 projects are not transactions where the Government procures any goods or services, but are instead sponsorship programs where the Government selects a P3 partner whom it will sponsor to assume certain risks associated with the redevelopment, design, building, financing and operation of the Airport by the private sector. Because of the unique structure of a P3, the Government's Financial Instructions do not specifically provide guidelines for this type of financial transaction.

The Financial Secretary asked the Accountant General of Bermuda for permission to proceed with the Government's "incremental selection" process with the G2G partner, the CCC, which by necessity would not be a competitive tendering process. That permission was granted by the Accountant General in 2014, on the condition that, when available, further information can be provided on CCC's fees, even at a high level, to enable an evaluation of value for money for "the services".

The FCO raised questions concerning whether or not the Government had followed general rules of public expenditure best practices. Those inquiries led to a joint retainer by the Government and Deloitte Ltd. to compare the P3 partner selection process to the UK government's (HM Treasury) non-mandatory Green Book guidance on recommended practices for the evaluation of Public Section spending proposals.

The Letter approved the Government to proceed to negotiate and enter into a P3 redevelopment and operations concession contract with CCC. This approval was contingent on the development of this Report to address the recommendations of the Deloitte report.

Selection Rationale

Summarized below, and detailed further in **Appendix 5 – Procurement Strategy**, are the key rationale and/or considerations for the Government when selecting CCC as a partner, for CCC when selecting a subcontractor, and for CCC selecting Aecon specifically.

Selection of CCC as the P3 redevelopment partner

- Their role and offering of a unique commercial structure
- The Government of Canada having the highest credit rating
- Confidence in CCC's contractor selection and vetting process, and oversight
- Successful past experience with the award winning Marsical Sucre International Airport in Quito
- Provision to Bermuda of direct contractual assurance the Project will be completed "on time, on spec and on budget"
- CCC's willingness to customize and uniquely formulate the transaction to accommodate the uniqueness of the Project

Selection by CCC of a P3 subcontractor

- When a Canadian company reaches out to and is looking for the option of a G2G approach for a project, CCC:
 - Verifies if the company has a proven track record with CCC for projects.
 - Assesses the viability of the opportunity and if the potential deal is a good fit for a G2G contracting model.
 - Determines whether it can support the supplier.
 - Screens prospective suppliers on various criteria and requires that its suppliers pass its integrity compliance and due diligence process.

Selection by CCC of Aecon

- CCC had recent experience with the Aecon group on a similar project for the redevelopment of the international airport in Quito, Ecuador.
- Aecon is seen as a leader in the development of P3s and has successfully partnered on over 25 P3 projects both domestically (in Canada) and internationally.
- CCC due diligence on the Aecon included the following:
 - i) The CCC Integrity Compliance Review
 - ii) The CCC Technical, Managerial and Financial Capability Assessment

Although CCC was chosen by the Government as its preferred P3 partner for the purpose of entering into commercial discussions for the Project, CCC will not be selected until the proposed P3 transaction actually closes. The 'selection' process undertaken by the Government has been cautious and graduated, with multiple 'off-ramps'. The process involved first a non-binding MOU signed November 14, 2014, followed by a series of Letters of Agreement confirming the Government's and CCC's intent that the Project be developed and operated under a long-term concession model, including the establishment of Project Co for the financing, design, construction, operation and maintenance of the Project. An Airport Development Agreement ("ADA") was entered into August 24, 2015, which will ultimately be followed by the execution and delivery of the definitive Project Agreement on (as at) the financial close of the Airport P3 transaction (expected by December 2016).

Negotiation Approach

The Government established clear lines of authority and accountability at the outset for the negotiation of the Project Agreement. The Project has been led by co-directors: the Financial Secretary and the General Manager of the Department of Airport Operations. This direction from senior civil servants ensured alignment with Government priorities and responsiveness from all Government stakeholders.

A project board (the "Project Board") was established under the chairmanship of the Minister of Finance to provide oversight, leadership, and direction on policy and high level commercial terms of the airport redevelopment transaction. In addition to the Minister of Finance, key Government of Bermuda stakeholders were represented on Project Board by the Minister of Tourism, Transport and Municipalities, the Minister of Economic Development, the Attorney General and the Minister of Public Works. Regular Project Board meetings were held to discuss project issues.

Supporting the Project Board was a transaction advisory team with proven experience with comparable P3 structures in transportation. Each member of the advisory team could draw upon its own experience and precedent transactions to ensure that the approach taken to project issues was consistent with the approaches used to solve similar issues in other transactions. The team of advisors included financial (CIBC World Markets), legal (Bennett Jones), technical (HNTB), operational (LeighFisher) and process / project management (KPMG).

This team of advisors helped the Government to formulate, develop and structure an airport P3 partner 'selection' process through those incremental stages of commercial development after CCC had been identified as a potential airport P3 partner.

The Government required a transparent financial model from CCC and its partner Aecon that was reviewed by the Government's financial advisor. Both the equity return available to the equity sponsors and the cost of individual elements of the combined construction and operations services were benchmarked against comparable airport projects and the Government's own information regarding alternative construction proposals and operating history.

Negotiations between the Government and CCC/Aecon have include activities such as:

- Design submissions by CCC/Aecon and reviews by the Government to arrive at the terminal requirements and standards to be met by CCC/Aecon
- Drafting of the operational standards to be met and the penalties for under-performance
- Review and discussion of the private financing to be provided for the Project
- Negotiation of commercial terms of the transaction including the setting of regulated fees, minimum revenue guarantee to be provided by the Government, sharing of revenues by the Government, and energy subsidy to be provided by the Government
- Negotiation of various rights and obligations of both the Government and CCC/Aecon.

With the negotiation approach, the Government is of the view that a contract acceptable to both parties can be reached.

Further details of the Negotiation Approach can be found in **Appendix 6 – Negotiation Approach**.

Value for Money

The VFM Assessment for the Project has been prepared by an independent consultant Steer Davies Gleave ("SDG"), an international consultancy with experience in major transportation projects and VFM Assessments.

The benchmarking summary and overall conclusions of SDG's VFM Assessment have been reproduced below. SDG's full report is provided in **Appendix 7 - Value for Money**.

Benchmarking to other airport transaction

The structure of the proposed G2G deal is similar to market trends in that it is built around a concession agreement transferring capital, maintenance and operating risks to the private sector. The length of concession varies between 20 and 40 years and Governments usually retain land and assets rights and provide some services and regulatory oversight.

Key difference is that there has been a tendency to benefit from market competitive tensions. However, there have been some noticeable failures in Jamaica and progress on deals in St Lucia and the Bahamas is also not clear, even though structured competitions took place.

In this case, the Government of Bermuda has relied upon highly experienced advisors to undertake the negotiations with CCC/ Aecon and provide a surrogate for competition.

It is not clear whether the costs of the advisory services to support the bilateral negotiation will be any different to the costs of running a full competitive tender. However, the likelihood of success of a negotiated deal is expected to be higher than under a competitive tender, given the small size of the airport and recent experience in the region.

Conclusion

Based on our review of the circumstances, analysis of the strategic and financial case and estimate of the economic impacts, the Government's chosen option (G2G) represents value for money when compared to the two Public Sector Comparators ("PSC"): PSC 1 - Status Quo and PSC2 – DB.

- The G2G option performs best in relation to strategic alignment with the Government's objectives.
- The G2G option is better than PSC2 (DB) in the estimated financial cost to the Government. While PSC1 (Status Quo) is the least cost option, it does not meet the strategic policy objectives and carries operating risks.
- Sensitivities were conducted for a number of assumptions, including traffic and capital expenditure used in the financial analysis, and the results shows the G2G option's financial ranking is unchanged.
- The G2G option performs best from the economic case, based on the higher traffic forecasts assumed by the Government and its advisors.

- The project is expected to generate strong economic benefits, including tourism, employment, as well as passenger benefits related to the better infrastructure provided. However, the estimates of economic benefits are highly dependent on the underlying traffic forecast and the benefits do not accrue solely to the airport project.
- We have conducted a benchmark exercise and observed that the proposed transaction is consistent with comparable airport transactions. Moreover, the chosen model, addresses some of the risks of delayed or cancelled tender processes elsewhere in the Caribbean region.

SECTION 4: FINANCIAL CASE

The Financial Case is primarily concerned with the cost versus funding proposition, or issues of affordability and sources of funding. The main basis for the case is the financial model as developed by Project Co. The model gives insight into the cash flows of Project Co over time. Other considerations discussed below are the budgetary and accounting impacts of the Project on the Government.

Financial Analytical Tools

The Ministry of Finance, in coordination with its advisors, developed two financial analytical tools in order to fully assess the financial aspects of the Project, both from the perspective of the Government and Project Co.

The first financial analytical tool was designed to capture the financial contributions that the Government will be providing to the Project that would have a direct impact on the Government's fiscal position. Projected future contributions by the Government were estimated and reviewed.

The second financial analytical tool was designed to assess the structure and terms of the concession and evaluate the corresponding return to Project Co. Both analytical tools were frequently updated during the Project negotiations as new information was obtained and commercial terms changed. These tools enabled the Ministry of Finance and its advisors to perform detailed analytics and react in real time during negotiations with Project Co in order to achieve the best commercial terms for the Government. There are several key commercial terms worth highlighting where this method was used to deliver tangible benefits to the Government during negotiations with Project Co.

- Concession Term
- Upside Revenue Sharing
- Minimum Revenue Guarantee
- Equity return
- Energy Supplement

Key outputs from the Project Co financial model include project financing structure, debt interest rate, and equity rate of return.

Further details on financial affordability and the analytical tools can be found in **Appendix 8 – Financial Analytical Tools**.

Budgetary Impact

Cash Flow Summary

The Ministry of Finance developed a cash flow summary under both the status quo scenario as well as the current transaction scenario.

The status quo scenario involved the existing terminal being kept in operation with minimal necessary maintenance capital investment. It is important to recognize that this scenario is not viable for numerous operational risk reasons. The status quo cash flows did not include any replacement capital and did not account for lost revenues or the potential broader negative economic impact on the Government as a result of the terminal being damaged and non-operational. Ongoing maintenance costs will escalate, and would merely delay the inevitable outcome where the airport terminal will need to be replaced. The risk of a major

infrastructure failure could result in excessive costs to repair or replace airport infrastructure on an urgent basis. The only practical solution for the Government is to replace the terminal.

Impact on the Government's Tax Base

Overall, the associated impact of the Project on the Government's tax revenue base is estimated to be relatively immaterial. It is estimated that the Government's tax revenue base would decrease 2.6% to 3.0%, ignoring any ancillary tax revenue benefits relating to the Project. Over the long term, this percentage is expected to decrease as Bermuda's economy is anticipated to exhibit growth that would result in higher overall revenues.

Ancillary Impacts Associated with the Project

In addition to the direct budgetary impact to the Government, there will be several ancillary benefits created by the Project. Hotel occupancy tax and payroll tax revenue will be higher as a result of increased tourism. Additionally, there will be certain "knock-on" effects to the overall Bermuda economy. The key "knock-on" effects include:

- Employment
- Preserving the Government's sovereign debt rating
- Upside revenue sharing
- Greater commercial acumen in terms of airport commercialization and securing increased flights
- Logistical support for America's Cup
- Reduced Airport interruption economic impacts

Further information on the Project's budgetary and ancillary impact can be found in **Appendix 9 - Budgetary Impact**.

Accounting and Balance Sheet Impact

Accounting Impact

The Government has engaged KPMG to provide professional advice with respect to the accounting and financial reporting implications to the Government of the proposed airport P3 transaction. KPMG's work is ongoing. On a preliminary basis and subject to change, the following is a summary of KPMG's findings.

There are no specific sections within the Canadian Public Sector Accounting Standards (PSAS) that address measurement, recognition and classification issues with respect to P3 arrangements. As a result, International Public Sector Accounting Standards (IPSAS) 32, Service Concession Arrangements is applied to assess this transaction. Based on this standard, the service concession asset (comprising the newly constructed airport facility) would be recognized by the Government of Bermuda and recorded on its financial statements as an asset as the facility is constructed by Project Co.

As the Government will recognize a service concession asset, the Government will be required to concurrently recognize a liability representing the unearned revenue assigned to Project Co throughout the 30 year term. This liability represents the Government's obligation to Project Co, were the Project Agreement to be terminated before the end of the 30-year term, for revenues assigned but not yet realized to offset facility construction and operating costs.

The Government has provided a Minimum Revenue Guarantee to Project Co if regulated revenues fall below a certain threshold during the term of the agreement. As the occurrence of future event is not yet determinable, the Government should disclose information regarding the existence of the Minimum

Revenue Guarantee in the notes of the financial statements, and monitor the likelihood of a required contribution during the annual reporting exercise.

Sovereign Debt Impact

The proposed transaction structure involves the creation of Project Co, which will raise the debt and equity capital required to finance the development of the Project and receive all cash flows generated by the airport during the concession term. SPCs such as Project Co are widely used and accepted legal structures for infrastructure concession transactions globally. For reference, an SPC is a separate legal entity formed for a single, well-defined and narrow purpose, which in this case is the redevelopment and operation of the Airport for the 30-year concession term.

As noted, Project Co will raise the debt financing required for the Project, which is estimated to be approximately \$275 million. Project Co is effectively “ring-fenced” and debt-holders will only have recourse to the cash flows generated by Project Co, or more specifically the net cash flows generated by the Airport. In the event the net cash flows generated by the Airport are insufficient to fund principal and interest payments, debt holders will have no other means to seek repayment of amounts owing. This is an important distinction, as the Government will not become liable for the \$275 million project debt if the Airport’s net cash flows are insufficient to pay principal and interest. As the Government is not liable for the debt incurred by Project Co, the Government would not be required to record the debt on its balance sheet and there would be no impact on its sovereign debt profile.

It is critical to note that the Minimum Revenue Guarantee (“MRG”) is not an outright guarantee of the project’s debt by Bermuda and only provides limited downside protection to debt holders specifically related to air traffic levels. As such, the MRG does not result in Bermuda becoming liable for the repayment of any of the project’s debt. Bermuda would, therefore, not be required to recognize the project debt as a liability and there would be no impact on Bermuda’s sovereign credit profile.

Credit Rating Impact

In determining whether the Project has any impact on the Government’s credit rating, the Ministry has reviewed each of the S&P factors and whether the Project has any resulting impact on these factors and the net impact, if any, on the Government’s overall sovereign credit rating.

- i) institutional assessment – no impact
- ii) economic assessment – potential upward impact
- iii) external assessment – no impact
- iv) fiscal assessment: flexibility and performance – neutral to slightly negative
- v) fiscal assessment: debt burden – potential upward impact
- vi) monetary assessment – no impact

Based on review of each of the standalone factors, on-balance the Project would have a neutral to net positive impact on the Government’s credit rating. This is based on additional growth that will be spurred by the Project from increased tourism and increased GDP as a result of the construction of the new airport.

Summary

The Government, with support from its advisors, has analyzed the projected cash flows under the status quo baseline and under the proposed transaction. The impact of the Government’s tax base due to loss of revenue generated by the Airport was also considered. Overall, the impacts are considered minimal and within the budgetary flexibility of the Government.

Under the proposed transaction, no sovereign debt needs to be raised as financing for the Project will be provided by Project Co and its lenders. In terms of the Government's credit rating, the Project is expected to have a neutral to net positive impact based on additional growth that will be spurred by the Project from increased tourism and increased GDP as a result of the construction of the new airport terminal.

Further information on the Project's accounting and balance sheet impact can be found in **Appendix 10 - Accounting and Balance Sheet Impact**.

SECTION 5: MANAGEMENT CASE

The goal of the management case is to outline the deliverability of the project and clarify responsibilities, governance and reporting mechanisms that will help to ensure that the Project can be delivered and managed successfully.

Program and Contract Management

The following section details the Government's use of external advisors, reporting mechanisms, project plan, risk management strategy, and contract management strategy. A more detailed discussion of program and contract management can be found in **Appendix 11: Program and Risk Management**.

Transaction Phase

Since the inception of the Project, the Government has solicited the advice and assistance of various external professional services firms to ensure the successful completion of the Project. These advisors are collectively referred to as the Government Advisory Team ("GAT"), and the group is co-chaired by the Government's Financial Secretary and the General Manager of the DAO. The list of external advisors and their roles are described below.

- Bennett Jones (Bermuda) Ltd. And Bennett Jones LLP – Legal Advisors
- CIBC – Financial Advisor
- Leigh Fisher – Technical Advisor (Operations)
- HNTB – Technical Advisor (Design and Engineering)
- KPMG – Project Management

Various reporting and oversight mechanisms are and have been in place to ensure that information can be collected and reported in a timely manner. In addition to reporting, these mechanisms have allowed timely and informed decision making, which is vital in keeping the Project on time and on budget. These mechanisms include:

- Government Advisory Team meetings
- Project Management Office meetings
- Project Board memorandums
- Project Board meetings
- Cabinet meetings

Operations Transition

Over the concession term, airport operations will be overseen by the BAA, which will represent the Government's interests and responsibilities in relation to the Airport. The BAA will be staffed by qualified employees with a knowledge of airport operations and P3 concession management. The BAA will be responsible for administering the Project Agreement, for the provision of the Retained Government Services (such as air traffic control), functioning as lessor, and for generating revenue from the deployment of its resources.

Risk Management Strategy

The Government has a risk management strategy to identify, assess, and control risks that emerge during the course of the Project lifecycle. This strategy includes the following tools:

- The use of advisors with specialist expertise in P3 concessions

- Processes for review
- Stipulated off-ramps
- Risk allocation in project agreement

The use of a P3 structure in itself is a risk mitigation mechanism. The deal structure allows the Government to transfer a significant portion of cost overruns and schedule overrun risk to the private sector. This risk transfer contributes to an overarching reduction of project risk. The table below summarizes the risk allocation between the Government and CCC/Aecon/Project Co over the construction and operating periods across key risk categories.

Risk	Project Co	Government	Shared
Financing	◆		
Design	◆		
Construction cost overrun	◆		
Construction delay	◆		
Airport operations	◆		
Commercial services	◆		
Meeting service standards	◆		
Facility maintenance	◆		
Aircraft rescue and firefighting		◆	
Airport traffic volume			◆
Pre-existing environmental contamination		◆	
Environment contamination from airport operations	◆		
Supervening events			◆
Change in aerodrome standards and international airport regulatory changes			◆
Energy consumption		◆	

The BAA will act as the Government’s contract manager for the Project Agreement, including ongoing monitoring of Project Co’s performance during the Construction and Operation phases of the Project. Some of the most important tools the BAA will use to monitor Project Co’s performance are the mandatory reporting requirements of the Project Agreement, Key Performance Indicators (KPIs) and the authority to impose penalties on Project Co for under-performance.

Contingency Plan

Stages of Contingency

The Government has developed contingency plans in the event of failure of the Project at any stage in its lifecycle. For this purpose, the Project’s life has been subdivided into four segments.

1. Before Settling the Project Agreement
2. After Settling the Project Agreement and before Financial Close
3. After Financial Close and Before the Completion of Design and Construction
4. After Completion of Design and Construction

A contingency plan has been put in place in the event the project fails at any of these stages. Details about the plan can be found in **Appendix 12 – Contingency Plan**.

Damage and Destruction

If the Airport is damaged or destroyed during the term of the Project Agreement, the Project Agreement will survive and Project Co will be required to rebuild the Airport. Insurance will be maintained by Project Co to the satisfaction of the insurance requirements detailed in the Project Agreement. If insufficient proceeds are available to rebuild, the Government may exercise its right to terminate the Project Agreement for Project Co default, in which case the insurance proceeds would be made available to the Government.

Regulatory Framework

Project Governance Structure

A rigorous project governance structure has been set in place to ensure the successful completion of the project. This governance structure is composed of the following entities that collectively ensure that proper governance for the project. These entities include:

- Project Board
- Co-Directors of the Project
- Project Management Office
- Government Advisory Team

Regulatory Oversight

As noted previously, the BAA will act as the governmental authority that will manage the contract with Project Co after the proposed deal is closed. Additionally, the BAA will provide oversight to airport services retained by the Government.

The current structure and various options of the BAA setup is being analyzed by the Government's advisors and Project Board. Prior to the establishment of the permanent BAA, it is likely that an interim body will be set up prior to Financial Close so that there will be a functional body that can take over responsibilities of the future BAA as soon as the deal closes. It is anticipated that the BAA will be established by Act of Parliament in December 2016.

Enabling Legislation

To support the Project and facilitate the transaction as documented in the Project Agreement, several legislative changes need to be made to existing laws. These collectively are referred to as "enabling legislation". The main enabling legislation that needs to be passed includes:

- Creation of BAA, including the airport lease
- Enabling tax concessions
- Deregulation of current regime of airport administration

The enabling legislative changes are expected to be tabled before Parliament by November 14, 2016 to facilitate closing the deal by December 2016.

Monitoring

Once control of the airport transfers to Project Co, a multitude of mechanisms will be in place for the BAA to provide oversight over the Airport. These mechanisms provide a way for BAA to monitor the contract,

and the ability for the Government to step in if Project Co is not fulfilling their duties or meeting the stipulated standards. These monitoring mechanisms range from monthly to annual reporting on various aspect of the airport construction, operations, and maintenance. For a detailed list of the mechanisms that are put in place, please refer to **Appendix 13 – Regulatory Framework**.

Summary

Since the outset, the Government has used a combination of professional advisors and a strong governance and reporting structure to ensure sound management of the project through the transaction process. The structure of the proposed P3 deal, the risk transfers to Project Co and the reporting mechanisms built into the project agreement will give the Government, through the BAA, the contractual levers to confidently manage both the redevelopment and operation of the Airport over the life of the agreement.

L.F. Wade Airport Redevelopment Project

Overall Business Case - Entrustment Report

Appendix 1 – Strategic Overview

**Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda**

This appendix outlines the strategic foundation under which the Airport is considering the Project. The report will detail the:

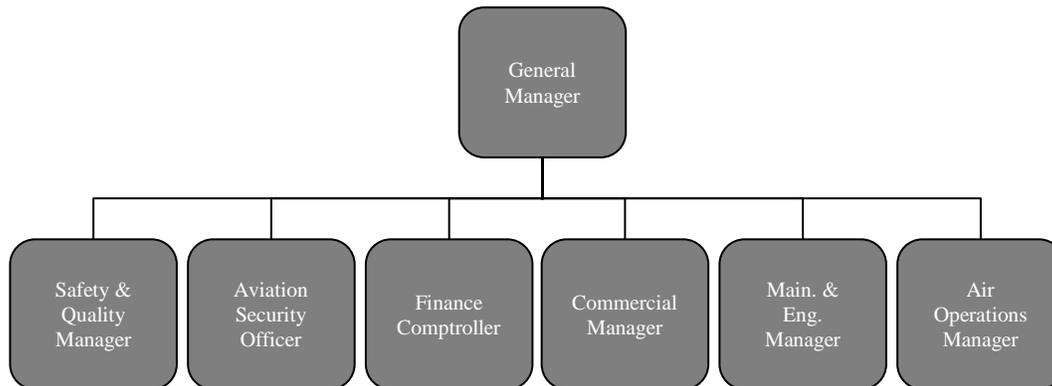
- Strategic context of the business environment
- Spending objectives, existing arrangements, and business needs of the airport
- Business scope and key service requirements of the airport in its future state
- Expected benefits and impacts of the Project.

Section I. Strategic Context:

Organizational Overview

The U.S. Military constructed Bermuda’s first land airport in 1940, and was named Fort Bell. Prior to 1995, the United States Navy maintained control and operations of the airport. In 1995, the US Government vacated the facilities and turned control over to the Government, the airport took the name Bermuda International Airport. In 2007, the airport was renamed to L.F. Wade International Airport.

Today, the Government owns and operate the Airport though the Department of Airport Operations, which is part of the Ministry of Tourism Development and Transport. The DAO is the airport operating authority, and the Bermuda Civil Aviation Authority (“BCAA”) is responsible for aircraft registration, safety regulation, and accident investigation. The following is an organization chart of the key personnel and roles currently at the Airport.



Other government departments and agencies that operate at the Airport include the Department of Immigration, Her Majesty Customs, U.S. Customs and Border Protection, Bermuda Fire and Rescue Services, Airport Police Services, Department of Health and the Post office. These departments collectively offer critical support services that ensure the efficient operations of the Airport.

Existing Business Strategies

The L.F. Wade International Airport is the only airport on the island and plays a key role in connecting Bermuda to the rest of the world. It is the main method of transportation for tourism and international business, which are two industries core to the Bermuda economy.

The Airport’s mission is “to satisfy the needs of our customers by facilitating the processing of all passengers and cargo in a safe, secure, and proficient manner.”

Based on the L. F. Wade International Airport 2013 3-Year Strategic Plan, the Airport's overarching business strategy consist of four main objectives:

- Work towards International Civil Aviation Organization (ICAO) Category 1 airport status
- Plan and initiate mission critical capital projects
- Identify and secure new revenue streams
- Work towards energy self-sustainability

Each of these objectives will be discussed below.

Work towards International Civil Aviation Organization (ICAO) Category 1 Airport Status

The objective to work towards obtaining ICAO Category 1 airport status is to satisfy ICAO requirements to ultimately assume control of Bermuda's airspace. By accomplishing this objective, the Government of Bermuda will be able to assume both responsibility for and control of its airspace, which will result in additional revenues from tariffs paid by aircraft that utilize Bermuda's airspace. The resulting increase in revenue generated may be used to offset the cost of upgrading airport infrastructure and expanding air traffic control operations.

Plan and initiate mission critical capital projects

In order to remain in compliance with ICAO regulations, the DAO needs to plan and execute capital projects including the Visual Slope Segment Penetration and the Castle Harbour Foreshore Infill projects which are on the critical path to accomplishing Category 1 airport status. In addition to the longer-term goal of becoming a Category 1 airport, there is an immediate imperative to implement these capital projects so that the Airport is compliant with ICAO requirements.

Identify and secure new revenue streams

The Airport manages its responsibilities using a commercial model that is similar to the business model used by many international airports around the world. The two main sources of revenue are from tariffs and fees, and commercial income from retail, property leasing, advertising, etc. These revenues cover operational costs and, ideally generate a profit that can be used to re-invest into the Airport or is contributed towards the Government's consolidated fund.

Notwithstanding whether the Airport retains all or a portion of revenues earned, DAO is committed to pursuing additional relevant revenue enhancing strategies to improve the Government's fiscal position. These strategies include:

- Competitive selection process for the use of apron 6 and other airport lands for environmental and renewable energy
- Increase in Airport fees and charges to align with international fee levels, e.g., fuel, passenger facilitate charges, security, etc.
- Common use charges to airlines
- Extending duty free provisions
- Extending user fees to include commercial vehicles doing business at the airport

Work towards energy self-sustainability

The Government has been identifying and assessing the feasibility of utilizing the airport lands as a site for the installation of alternative renewable energy technologies. The Government has assumed control of perimeter properties and land which is an essential step in furthering this goal. For example, the Government could use renewable energy technologies, such as photovoltaic, solar and/or wave energy to power or supplement the power to the Airport. Additional capacity generated could be sold to generate additional revenue.

Section II. Spending Objectives, Existing Arrangements, and Business Needs:

Spending Objectives

In addition to DAO's long term strategic planning, more immediate issues are on the DAO's spending objectives. The current Airport infrastructure is outdated and many critical components of the building are in need of repair. The airport terminal will require significant sustaining capital in the coming years to maintain its current operational capacity. In the process of remedying the structural problems of the existing terminal, the solution will need to take into consideration of the following objectives.

To Increase efficiencies, capacity, and safety of airport operations, the solution:

- Will need to allow the airport to operate at maximum efficiency to allow capacity for any future increase in passenger traffic.
- Should improve customer experience and accelerate passenger processing.
- Must improve or maintain operational safety for all passengers and personnel at the airport.
- Must allow the airport to meet ICAO Category 1 status standards.

To stimulate the economy through investing in critical national infrastructure, the solution:

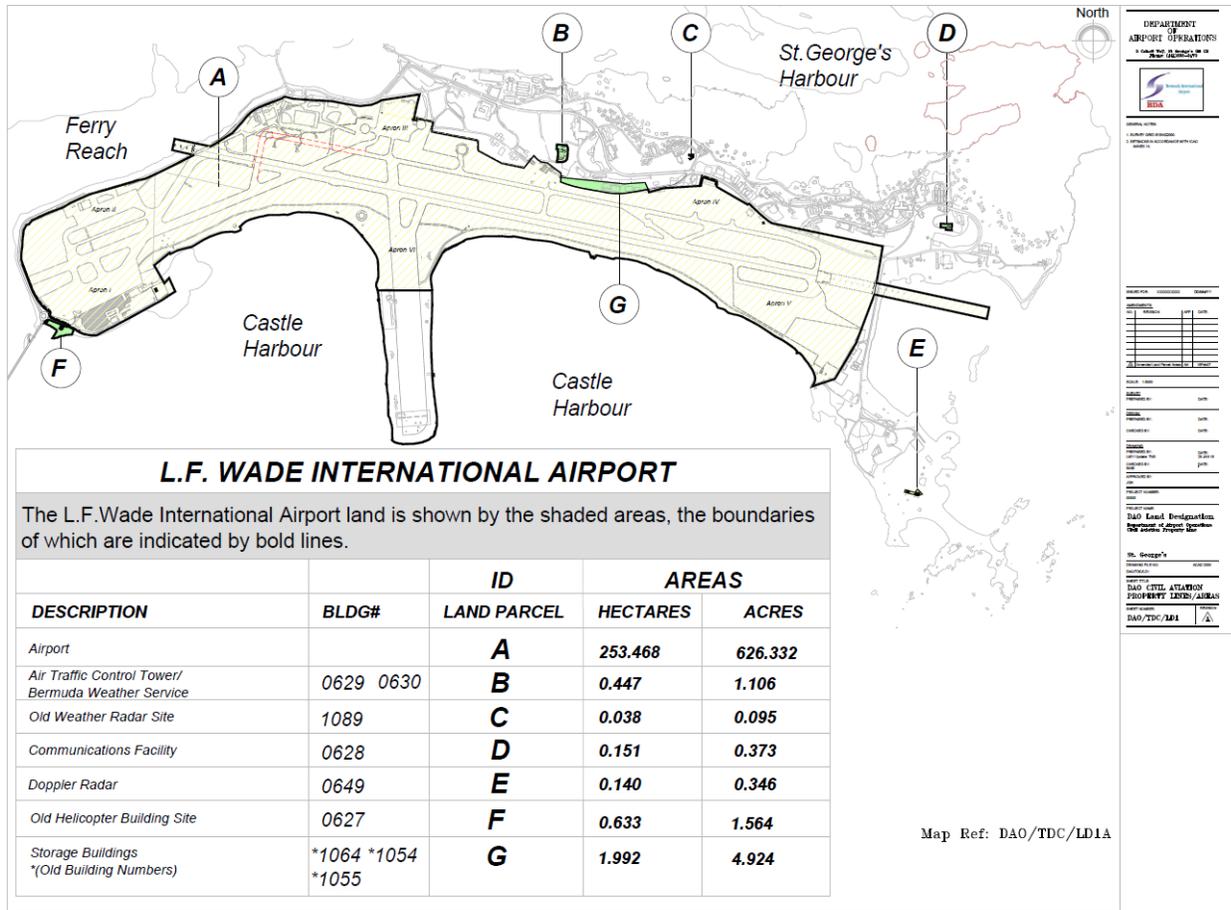
- Should promote and increase tourism to Bermuda.
- Should generate new jobs for the local Bermuda workforce.
- Should develop skills and expertise for Bermudian labour.

To increase the brand value of Bermuda, the solution:

- Should provide a modernized building that is aesthetically pleasing to give visitors to Bermuda a good first impression.
- Should provide locals and visitors a "sense of place" once they arrive at the airport.
- Should promote market awareness of Bermuda as a travel destination.

Existing Arrangements

The L.F. Wade International Airport currently spans 216 hectares of land, features a 2,961-metre air carrier runway, a taxiway system connecting the runway with various parts of the Airport, a passenger terminal, cargo facility, executive facility, and various support facilities. The airport can support aircraft of all sizes up to and including the Airbus A380. The figure below illustrates the layout of the airport.



The airport is currently served by Air Canada, American Airlines, British Airways, United, Delta Airlines, JetBlue and WestJet, and offers service to many destinations in Europe, Canada and the U.S., including travel hubs such as London, New York, Miami and Toronto.

The Federal Aviation Administration (FAA) provides en-route air traffic control (ATC) services from its New York Air Route Traffic Control Centre (ARTCC) for aircraft within Bermuda air space, while local ATC service is provided by the Bermuda Government via an agreement with CP².

To operate the airport, DAO is contracted with a wide variety of service providers that offer a wide spectrum of services to the airport. Major contracts include those for air traffic control, security, and baggage handling. Fuel is currently supplied by SOL, who has an underground hydrant fueling line that currently services the airport.

Business Needs

The Government is aware of several deficiencies at the airport that need to be resolved to ensure the safety and improvement of operations of the airport. In addition, changes will be needed to ensure the sustainable long-term operations of the airport. Specifically, the Government identified the following gaps and priorities as business needs as a part of the redevelopment of the airport.

Address structural needs of the airport

- The airport must be able to withstand category 4 storms.
- Airline fueling facilities and fuel lines will need to be tested and possibly relocated or replaced.
- The airport terminal currently leaks during heavy rainfall, and will likely need a new roof.
- There has been indication of mold in the terminal building that needs to be investigated and removed.

Improve customer experience

- There is a desire to decrease dwell time for passengers during peak hours through immigration, and increase availability and use of terminal amenities by departing passengers.
- There is a need for the terminal to be equipped with passenger boarding bridges, to increase accessibility and protect passengers from inclement weather conditions while boarding.
- Building aesthetics need to be improved to leave a positive impression on customers.

Improve commercial and financial performance

- Additional commercial space for vendors and advertising is needed to generate non-aeronautical revenue.
- There is a desire to attract additional airlines and vacation options to Bermuda.
- Update the current revenue model to be in-line with other airports.
- Seek operational efficiencies and cost minimization strategies.

Section III. Business Scope and Key Service Requirements:

Potential Business Scope

Understanding the strategic context and existing business needs, the scope of the redevelopment project is focused around the needs of the airport and recognizing the limitation in the Government's resources. It was defined early on in the development process to ensure the project's strategic fit, affordability, and achievability. The scope of the project was used to drive the options that will be considered as potential development methods for the airport redevelopment.

Below are key scope factors considered in developing potential options:

- No new land is available to redevelop the airport
- There is no expected significant surge in tourism traffic
- The redeveloped airport will need to comply with ICAO Category 1 requirements
- There will not be a significant increase in partner airlines and destinations
- There will not be any major changes with the Government's existing relationship with US Customs

These scope requirements serve as the basis for which the development options are developed and provides boundaries for potential variations of the delivery method.

Resultant Service Requirements

Service specifications and requirements of the redeveloped or new terminal will likely contain the following specifications. These specifications will drive the size of any potential terminal, and high level cost estimate of the redevelopment.

- The Airport will need to be open at least 16 hours a day, current hours of operation are current 7AM to 11PM local time for essential operations (i.e. ARFF facilities and Bermuda air traffic control).
- HM Customs and Immigration is expected to require an additional 9,000 square feet, and U.S. Customs an additional 5,000 square feet. HM Customs, Immigration and U.S. Customs currently have approximately 43,000 square feet.

- There are currently 10 agent counter positions in the immigration area. The Government would like to reduce the processing time for arriving passengers at immigration and HM Customs.
- The airport should have sufficient numbered gate positions.
- Gates should be equipped with loading bridges, whereas passengers currently enplane and deplane the aircraft via aircraft stairs.
- The terminal facilities require an additional 60,000 square feet or approximately 20% of the current terminal space.
- Total passenger traffic volumes exceeding 800,000 passengers per year.
- There should be sufficient space dedicated to check-in counters to accommodate future processes.

Section IV. Expected Benefits and Impacts of the Project:

Benefits

Tourism

The airport is an important piece of the national strategy to boost the economy. Visitors to Bermuda drive increased spending in various sectors of the economy, and support current and future jobs. Word of mouth is often a key contributing factor in referring friends and family of future visits to a tourist destination. A more efficient and aesthetically pleasing airport terminal will increase the brand value of Bermuda and drive increased visitors to the country. Significant investment in the airport terminal-should provide long-term benefits and returns in terms of capacity, traffic and tourism growth. It provides the country with a selling point to broaden their efforts to draw attention to Bermuda.

Improve Airport Operations

A redevelopment of the airport terminal will help remediate various inefficiencies and structural deficiencies of the current airport that negatively affects customer satisfaction and Bermuda's reputation as a whole as the airport is the first impression of the country for many tourists. The redevelopment will allow officials to reimagine the operating layout of the facilities and increase efficiency and effectiveness at the airport.

Jobs

A large-scale capital project such as the redevelopment of an airport terminal has the potential to create a significant number of jobs in Bermuda. In addition to the number of jobs created, it is likely that offshore expertise will be needed to provide training to local Bermudian labour, which is a benefit to the local workforce long after the Project is complete. Any offshore workforce to assist in the redevelopment of the airport will also help stimulate the local economy through the increase in spending at local businesses.

Impacts of the Airport Redevelopment Project

The Government has provided information on the Airport Redevelopment Project through stakeholder and public meetings. Information has also been posted on the Ministry of Finance website.

Key impacts of the Project have been outlined in the Airport Redevelopment Project Fact Sheet as follows:

- It will substantially improve a strategic Government asset
- It will create hundreds of jobs in the near future to build a new terminal
- It will increase long term employment for Bermudians at the airport once the project is completed
- It will provide a far better and safer working environment for Bermudians employed at the airport
- It will mean a more comfortable, safer and pleasant travelling experience for residents and visitors

- It will stimulate economic growth in Bermuda without further encumbering the already excessive debt burden of the government
- It will be the best deal the Government can get at designing, building and financing the largest single project undertaken by the Government
- The Canadian Commercial Corporation – a 100% Canadian Government owned entity – will guarantee the delivery of a state-of-the-art terminal building on-spec, on-time and on-budget
- Travelers – especially the elderly and disabled – will no longer be wind-blown and rain-swept walking to and from the aircraft
- It is an opportunity to finally get something done to improve the deplorable, deteriorating conditions at Bermuda's major gateway.

L.F. Wade Airport Redevelopment Project
Overall Business Case - Entrustment Report
Appendix 2 – Critical Success Factors

Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda

This appendix provides an overview of the CSFs for the Project. Specifically, the report identifies the CSFs, and discusses the actions that should be taken to ensure achievement of these success factors.

Section I. Identified Critical Success Factors:

Critical success factors are attributes that are essential to the successful delivery of the Project. As such, they provide a basis against which the potential options are assessed. For the purposes of the Project, the CSFs identified are crucial, and have been set at a high level to ensure that important options are not excluded from future analysis. These factors are listed below and summarized in Table 1:

- Strategic business fit;
- Value for money;
- Government of Bermuda (the “Government”) affordability; and
- Government achievability.

Table 1: Critical Success Factors

Critical Success Factor	Description of Critical Success Factors	Required Actions to Achieve Success
Strategic business fit	The current airport terminal is out of date and requires a significant amount of capital maintenance spending to keep the building operational. The terminal does not operate efficiently and there are significant structural deficiencies that need to be addressed immediately and in the upcoming years. These issues pose a risk to safety and affects the brand that Bermuda conveys to visitors. As such, closing these critical infrastructure gaps to ensure efficient and effective airport operations is a key factor that must be achieved in order for the Project to be considered a success.	The Government will compare various redevelopment options that range from fixing the existing terminal to building a new airport terminal. Through options analysis, the Government will need to ensure that the selected options will align with the business strategies of the airport.
Value for money	Given the Government’s limited financial resources, the Government should pursue an option that efficiently and economically spends Government funds to achieve the Department of Airport Operations’ spending objectives.	The Government will perform value for money analysis to determine the preferred option.
Government achievability	The Government needs to ensure that it will be able to successfully complete the Project. As such, the Government will need to set achievable targets for the Project and ensure that there are sufficient resources and capacity to manage the redevelopment of such a major project. Project options will identify the achievability of local and national goals.	The Government will perform an assessment of available resources to identify possible constraints (including labour, material, and regulations) that will be required to complete the Project. The Government will hire external advisors to support the Project where there are identified gaps.

Government affordability	The airport terminal redevelopment is expected to require significant capital from the Government of Bermuda, and as such, budget affordability should be considered in the analysis of various options.	Financial impact and budgetary impact analysis will be performed to help support the Government’s assessment of affordability.
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Section II. Strategic Business Fit:

Strategic business fit is one of the most important success factors that needs to be considered for the Project. To proceed with any proposed option, the option must align with the strategic business fit of the Government of Bermuda and the Department of Airport Operations. Specifically, the option must consider the Department’s spending objectives, existing arrangements, business needs, and service requirements.

The current terminal has ongoing problems that have arisen due to aging equipment and infrastructure. As a result, the airport terminal is not able to operate efficiently. There are significant deficiencies that exist and will need to be resolved in the upcoming years. These deficiencies include the structural integrity of the terminal roof, the absence of loading bridge access at terminal gates, and insufficient customs and immigration processing capacity. These issues pose direct inefficiencies to the safe and effective operations of the airport, which impacts the brand that Bermuda conveys to visitors. Significant capital spending would be required to renovate the current terminal to a state that would resolve these issues. Further capital would be required to improve the airport terminal beyond these necessary changes. This includes improving the operational efficiency, flexibility, and the visual appeal of the terminal.

To align with the Government’s strategic requirements, the proposed option should:

- Close the gaps in infrastructure needs
- Support future air and passenger traffic service requirements
- Boost the image and brand value of Bermuda.
- Provide jobs and prompt skilled training for Bermudians that will have lasting impact for the local labour force and economy.
- Maintain fiscal sustainability.

Section III. Value for Money:

To develop the optimal approach for the Project, the Government will assess the range of options from both quantitative and qualitative perspectives. The analysis will include comparison of available options in terms of the following:

- Net costs to the Government (in net present value terms)
- Amount of investment and government debt required
- Strategic, economic, and social factors
- Risk factors

A comparison of the proposed option against a Public Sector Comparator will be prepared to demonstrate Value for Money of the proposed option.

Section IV. Government Achievability:

The Government will need to consider project achievability when considering various options for the Project. Achievability is a critical consideration, as the inability to manage and deliver a project will waste significant amounts of taxpayer money. The two components of achievability are setting realistic targets

and ensuring availability of resources to achieve those targets. The Government will need to define a clear list of spending objectives and requirements, and will adhere to achieving those requirements. The Government will solicit the help of external advisors as needed to implement the project.

Section V. Government Affordability:

In order for the Project to be successful, the option selected must be affordable. In this case, affordability relates to the capacity for the Government to fund the through life cost of the project given its existing fiscal constraints. In whatever form the Project will take, the Government must be able to pay for any construction, operations, maintenance, and financing over the life of the Project.

The assessment of affordability will be performed iteratively throughout the selection of the development options, and once the final option has been chosen. Affordability should be assessed with the help of various financial and budgetary impact analysis that will be performed.

Throughout options analysis, the Government will consider various strategies and options that would affect the affordability of the Project. These options shall include various innovative partnerships with the private sector to improve the affordability of the Project.

L.F. Wade Airport Redevelopment Project
Overall Business Case - Entrustment Report
Appendix 3 – Options Analysis

Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda

This appendix provides an overview of the Government’s review, consideration and assessment of the various internal and commercial options to address the Government's public policy objectives associated with: infrastructure renewal; economic stimulation and employment; airport facility environmental security; airport health & safety remediation; tourism and international business brand alignment; and, prudent financial and risk management.

Section I. Overview of Commercial Options:

The Government has formulated this review based, in part, on the professional advice of each of its external advisors.

Options	Commentary
<u>A. Internal Options</u>	
<p>A-I. Maintain The Airport At Current Levels</p> <p><i>This is the alternative of merely maintaining the most urgent repairs and safety considerations, and the avoidance of capital expenditure unless urgently required for safety or legal compliance. This is the “status quo” option.</i></p>	<p>Advantages:</p> <ol style="list-style-type: none"> 1) No short-term capital cost. 2) No transaction costs. 3) The Government would retain the net cash flows generated by the airport. <p>Disadvantages:</p> <ol style="list-style-type: none"> 1) The currently deteriorated physical infrastructure is costly to maintain, and repairs require capital expenditure. 2) Heightened risk of weather related damage to existing buildings, which will require significant capital expenditures in the future. 3) Public and personnel health and safety standards must be considered, since liability will precipitate from any harm caused by late/poor maintenance. 4) Increasing amount of management/operational time must be devoted to deteriorating infrastructure, public complaints, and reputational management. 5) Maintenance costs will increase. 6) Cash flows generated may be less than annually required maintenance expenditures to keep the airport terminal up to requisite standards. 7) This is an ad hoc, not proactive, approach to emergency remediation, i.e. fix upon failure. 9) Requires constant legal compliance monitoring, assessment, inspection and oversight. 10) This approach risks personal harm, liability for negligence and breach of Government duty of care, and the expense of litigation and associated damages.
<p>A-II. Varying Degrees of Capital Renovation</p> <p>As in the prior alternative, but with a program for distinct strategic investments in individual infrastructure components over a prolonged timeframe.</p>	<p>Advantages:</p> <ol style="list-style-type: none"> 1) Limited capital costs. 2) Opportunity to prioritize expenditures. 3) Less disruption of airport services than a complete rebuild. 4) The Government would retain the net cash flows generated by the airport.

	<p>Disadvantages:</p> <ol style="list-style-type: none"> 1) Hard to plan successive and incremental capital improvements that will all, over time, have continuity and "fit together". 2) Renovation will not change the existing footprint of the terminal building and it will continue to be susceptible to storm surge and weather related damage 3) Risk of piecemeal changes being, in the aggregate, more expensive than a single macro-renovation. 4) Not always possible to choose the priority projects correctly (e.g. something further down on the list might fail first). 5) Continuing disruptions to airport operations over a longer period.
<p>A-III. Entire Airport Renovation Staged In Phases (e.g. current Cayman Airport Revitalization)</p> <p><i>As in the prior alternative, but the program for renovation would constitute a staged wholesale replacement over a prolonged schedule.</i></p>	<p>Advantages:</p> <ol style="list-style-type: none"> 1) Limited capital costs. 2) Opportunity to prioritize expenditures. 3) Less disruption of airport services than a complete rebuild. 4) The Government would retain the net cash flows generated by the airport. 5) Maintenance expenditures would be lower going forward relative to other internal options. <p>Disadvantages:</p> <ol style="list-style-type: none"> 1) Requires the same detailed design and replacement architectural planning as building an entirely new airport terminal, however the logistics of phased development can be very difficult to manage over much longer period of time (construction resources arriving, then leaving; successive governments; disruption to operations/passenger experience for many years, etc.). 2) Renovation will not change the existing footprint of the terminal building and it will continue to be susceptible to storm surge and weather related damage 3) All of the same issues that must be considered for Option A-II above. Such "phased development" projects can be very expensive and often requires a dedicated (experienced) full-time Project Management Team over many years. 4) All of the disadvantages of A-I above exist for those parts of the airport terminal that are not (while they are not) renovated.

<p><u>B. External Options: Public Sector Collaborations With Private Sector</u></p>	
<p>B-I. Government Rebuilds Airport At Its Expense & Outsources Facility Operations & Management</p> <p><i>Government designs and builds the Airport terminal at its cost and expense. Government retains a private sector "facility/operations" management enterprise to operate the Airport as a fee-paying lease for a fixed term. All standards, risk allocations, scope of service (etc.) is governed by the Airport Operations Service Agreement.</i></p>	<p>Advantages:</p> <ol style="list-style-type: none"> 1) Government has full control over design and construction 2) Service provider takes on operations risk and risk of profitable operation 3) The Government would not retain the net cash flows generated by the airport; however, it would receive cash flows in the form of an annual lease payment from the firm operating the terminal thereby reducing revenue risk – to the extent of the credit quality of the third party operator. 4) Maintenance expenditures would be lower going forward. 5) New terminal would have better protection from hurricanes and storm surges as a result of improved location. <p>Disadvantages:</p> <ol style="list-style-type: none"> 1) Government control of design exposes Government risk of "scope creep": Government procured infrastructure historically suffers from poor scope definition and failure to create business case for desired features. 2) Government is exposed to design and construction cost overruns. 3) Government has full capital funding obligation. 4) Government borrowing capacity may hit its limit. 5) Lack of integration between design and construction on the one hand, and facility operation services, on the other hand opens door to disputes and "finger pointing" between design/construction and the operation service provider over premature failure/lifecycle costs 6) No optimization of capital cost vs. operations cost (e.g. buying a ten year product that you plan to replace three times or paying much more for a 15 year product you plan to replace only twice.
<p>B-II. Design Build Finance Operate (DBFOM)</p> <p><i>Single private sector enterprise is retained on a "turn-key" basis to undertake all aspects of the Airport revitalization, including operation for typical 25 to 35-year period. Government maintains control over operation quality via a comprehensive contract and regulatory interface.</i></p>	<p>Advantages:</p> <ol style="list-style-type: none"> 1) Integration of design/construction with operations allows optimization of capital cost vs. operating cost. 2) No "finger pointing" over premature failure or warranty claims. 3) No immediate capital costs 4) Limited financial risk to Government (no public sector guarantee); the Government is insulated from construction price risk through a fixed price construction agreement. 5) When structured through a unique Canadian Commercial Corporate "Prime" structure, the Government transfers to CCC, "on time; on spec.; on budget" construction project delivery risk. 6) Cost of construction is borne by users of airport through passenger fees rather than payments by the government. 7) Private sector is responsible for financing the development of the airport terminal and therefore, there are no incremental

	<p>financing impacts to the Government and no impact on its sovereign credit rating.</p> <ol style="list-style-type: none"> 8) Private sector is incentivized to drive higher traffic volumes, as it is an equity shareholder in the concession, which should translate into higher tax revenues for the Government through ancillary taxes such as the hotel occupancy tax. 9) The Government would share in the upside cash flows of the airport during the concession through a defined sharing mechanism. <p>Disadvantages:</p> <ol style="list-style-type: none"> 1) Loss of flexibility to introduce new uses or services. 2) Financing cost built in at a higher cost than pure government financing. 3) Transactions can be very complex since there is full integration of construction with facility operation services.
<p>B-III. Design Build Operate (DBO)</p> <p><i>Same as DBFOM but the Government must finance the capital construction costs of the project. Much like multination corporations who outsource the development of large infrastructure (large data centres, resorts, factories) which they must pay to create and operate with both revenue risk and profit ownership.</i></p>	<p>Advantages:</p> <ol style="list-style-type: none"> 1) Integration of design/construction with operations allows optimization of capital cost vs. operating cost. 2) No "finger pointing" over premature failure or warranty claims. 3) Lower cost of financing because of government credit. 4) The Government is insulated from construction price risk through a fixed price construction agreement. 5) Maintenance expenditures would be lower going forward. 6) The Government would share in the upside cash flows of the airport during the concession through a defined sharing mechanism. <p>Disadvantages:</p> <ol style="list-style-type: none"> 1) Government borrowing capacity strained. 2) Loss of flexibility to introduce new uses or services.
<p>B-IV. Design Build (DB)</p> <p><i>Private sector designs and builds a facility that is financed by Government, but unlike A-III, that one project is not phased over time. The private sector must deliver the facility "on time, on spec, on budget" as a single point of liability for the creation of the facility exactly as bid. Private sector Facility Management Services are outside of the scope of a DB transaction.</i></p>	<p>Advantages:</p> <ol style="list-style-type: none"> 1) Integration of design and construction creates an advantage over traditional design/bid/build procurement by reducing delivery time. 2) Lower cost of financing because of government credit. <p>Disadvantages:</p> <ol style="list-style-type: none"> 1) Cost overrun exposure from scope creep. 2) No protection against escalation of operating costs. 3) "Finger pointing" over premature failure or warranty claims. 4) Government borrowing capacity used up.

<p>B-V. Construction Procurement; Facility Management Fee For Service</p> <p><i>Design/build or traditional design/bid/build procurement required for construction, but also includes an invitation for the builder to collaboratively team with a Facility Management Service Provider to operate the Airport on a fee for service basis (Airport revenues belong to the Government and a service fee is paid by Government to the facility management service provider).</i></p>	<p>Advantages:</p> <ol style="list-style-type: none"> 1) Integration of design and construction creates an advantage over traditional design/bid/build procurement by reducing delivery time. 2) Lower cost of financing because of government credit. 3) The Government is insulated from construction price risk through a fixed price construction agreement. 4) The Government would retain the net cash flows generated by the airport. <p>Disadvantages:</p> <ol style="list-style-type: none"> 1) Cost overrun exposure from scope creep. 2) No protection against escalation of operating costs. 3) "Finger pointing" over premature failure or warranty claims. 4) Government borrowing capacity used up. 5) All commercial and financial risk resides with Government except for remedial rights for breach of service contract. 6) All airport operations remains within the governance, oversight and performance assurance of Government with risks of dispute, litigation and remedial enforcement.
<p>C. External Option – Private Sector Alone</p>	
<p>C-I. Privatization</p> <p><i>Government sells the land, transfers all business assets and personnel to purchaser. Purchaser agrees to contracted standards of "best practices" and subject to ongoing Government control through a statutory regime of highly regulated oversight and governance. No reversion to public sector, and all risk of business transfers, e.g. British Post, to the private sector. Government's remaining risk is the impact of Airport performance on the economy/reputation.</i></p>	<p>Advantages:</p> <ol style="list-style-type: none"> 1) No capital cost to Government. 2) No operating cost to Government. 3) Revenues generated from sale of airport assets 4) The Government is insulated from construction price risk through a fixed price construction agreement. 5) Private sector is responsible for financing the development of the airport terminal and therefore, there are no incremental financing impacts to Bermuda and no impact on its sovereign credit rating. 6) Private sector is incentivized to drive higher traffic volumes, as it is an equity shareholder in the concession, which should translate into higher tax revenues for the Government through ancillary taxes such as the hotel occupancy tax. 7) The Government would likely receive ongoing royalty income from private sector for privatization. <p>Disadvantages:</p> <ol style="list-style-type: none"> 1) Except as regulated, loss of control over infrastructure. 2) Often requires the sale (entire assignment) of foundational assets (such as land) to the private sector. 3) Onerous regulatory oversight role for Government on an ongoing basis. 4) Public policy challenges related to labour, etc.

Section II. Detailed Review of Comparative Project Option Disadvantages:

The following provides a more detailed review and assessment of the Government's concerns with each of the above transaction options and alternatives.

A. Internal Options

A-I. Maintain Airport at Current Levels:

- Airport is the main gateway to Bermuda and is the first, and last, impression that tourists have of the island. As tourists represents over 40% of total air traffic to Bermuda, a deteriorating, dated terminal building will likely leave a poor impression in the minds of tourists, which will lead to continued challenges in passenger traffic figures.
- Simply maintaining the building will leave the airport terminal vulnerable to hurricanes and other storm surges which may result in significant damage to the airport as the existing terminal is located directly adjacent the shore and has limited protection. The cost of repairing these damages will be borne by the Government and these cash outflows could be significant.
- The government cannot underestimate the material and current risks of personal injury and harm that may result in significant liabilities both in the form of litigation expenses and damage awards.
- Deterioration of the building will continue and significant annual maintenance capital expenditures will be required to keep the building up to requisite standards. Furthermore, the maintenance cost of keeping the terminal up to requisite standards will likely increase over time.
- Airport terminal could become non-operational during maintenance periods, which may reduce number of flights and overall passengers thereby reducing revenues to the Government.
- Difficult to increase non-aeronautical/concession revenues as existing terminal layout remains unchanged.
- Airport would continue to be operated under the “status quo” which will not result in an upward shift in traffic levels. All else being equal, the Government will generate lower revenues as a result of lower passenger volumes from ancillary taxes such as the hotel accommodation tax.

Financial Analysis – Maintain Existing Terminal at Current Levels

Illustrative Net Present Value Analysis – Maintain Existing Terminal (\$ millions)										
	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2046</u>
Cash Inflows										
Airport Operating Cash Flows	4.0	4.1	4.2	4.2	4.3	4.4	4.5	4.6	4.7	7.1
Net Cash Inflows	4.0	4.1	4.2	4.2	4.3	4.4	4.5	4.6	4.7	7.1
Cash Outflows										
Project Borrowing Costs	(14.0)	(13.7)	(13.4)	(13.2)	(12.9)	(12.6)	(12.4)	(12.1)	(11.8)	(6.2)
Incr. Hotel Accommodation Tax	(0.6)	(0.4)	(0.4)	(0.4)	(0.4)	(0.5)	(0.5)	(0.6)	(0.7)	(4.5)
Maintenance Capital Costs	(5.3)	(5.5)	(5.8)	(6.1)	(6.4)	(6.7)	(7.0)	(7.4)	(7.8)	(21.6)
Net Cash Outflows	(19.9)	(19.6)	(19.6)	(19.7)	(19.7)	(19.8)	(19.9)	(20.1)	(20.2)	(32.3)
Net Cash Flows	(15.9)	(15.6)	(15.4)	(15.4)	(15.4)	(15.4)	(15.5)	(15.5)	(15.6)	(25.3)
Total Undiscounted Cash Flows	(551)									
Net Present Value	(283)									

Key Assumptions:

Cash Flow Item	Description
Airport Operating Cash Flows (+)	- Represents net cash flows generated by the airport that would be retained by the Government cash flows have been forecasted under the no revenue growth scenario. Rationale for no growth scenario is that there would be no change in the commercial, operational, or management capabilities of the airport under this option and terminal would be in poor physical condition, which may hinder growth.
Borrowing Costs (-)	- The Government would need to borrow ~\$184 million to finance urgent near term maintenance and improvements in the first two years. It is assumed that this would be done through general government borrowing with no impact on the Government's sovereign rating. Debt repayment was assumed to occur over a 30-year period in order to ensure comparability to the other scenarios. These are conservative assumptions and the costs could be substantially higher depending on the scope of the work required or increases in the Government's cost of borrowing.
Incremental Hotel Tax Revenue (-)	- Under this option, Bermuda would likely have lower passenger volumes and hotel accommodation tax revenue to the government would decrease
Maintenance Costs (-)	- The Government would be required to pay for maintenance costs for the airport under this option. These costs are estimated to be \$5.0 million per year based on historical capital expenditures, although the actual value could be much higher, and escalated at 5% per the Government's technical advisor analysis.

A-II. Varying Degrees of Capital Renovation:

- Airport is the main gateway to Bermuda and is the first, and last, impression that tourists have of the island. As tourists represents over 40% of total air traffic to Bermuda, a deteriorating, dated terminal building, despite certain terminal improvements, will likely leave a poor impression in the minds of tourists and business travelers, which will lead to continued challenges in passenger traffic figures.
- Performing certain terminal improvements and continuing to maintain the current terminal building will continue to leave the airport terminal vulnerable to hurricanes and other storm surges which may result in significant damage to the airport as the existing terminal is located directly adjacent the shore and has limited protection from storm surges. The cost of repairing these damages will be borne by the Government and these cash outflows could be significant.
- Regardless of the terminal improvements, deterioration of the current building will continue and significant annual maintenance capital expenditures will be required to keep the building up to requisite standards. Some of the buildings are over 60 years old, and have been through numerous hurricanes. Furthermore, the maintenance cost of keeping the terminal up to requisite standards will likely increase over time.
- Material parts of the airport terminal could become non-operational during terminal improvements and maintenance periods, which may reduce number of flights and overall passengers thereby reducing revenues to the Government.
- Difficult to increase non-aeronautical/concession revenues as existing terminal layout remains unchanged.
- Airport would continue to be operated under the "status quo" which will not result in an upward shift in traffic levels. All else being equal, the Government will generate lower revenues as a result of lower passenger volumes from ancillary taxes such as the hotel accommodation tax
- From a non-aeronautical revenue perspective, it would be difficult to grow concession revenues as the terminal improvements would not result in a significant change to the terminal layout, which is characterized, by a poor layout that negatively impacts dwell times and limited space for concessions.

Financial Analysis – Varying Degrees of Capital Renovation

Illustrative Net Present Value Analysis – Varying Degrees of Capital Renovation (\$ millions)

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2046</u>
Cash Inflows										
Airport Operating Cash Flows	6.9	7.0	7.1	7.3	7.4	7.6	7.7	7.9	8.0	8.5
Net Cash Inflows	6.9	7.0	7.1	7.3	7.4	7.6	7.7	7.9	8.0	8.5
Cash Outflows										
Project Borrowing Costs	(38.8)	(38.0)	(37.2)	(36.4)	(35.6)	(34.8)	(34.0)	(33.2)	(32.4)	(15.5)
Incr. Interest Costs on Sovereign Debt	(2.4)	(2.4)	(4.2)	(9.2)	(9.2)	(10.6)	(15.9)	(23.4)	(23.4)	(23.4)
Incr. Hotel Accommodation Tax	(0.6)	(0.4)	(0.4)	(0.4)	(0.4)	(0.5)	(0.5)	(0.6)	(0.7)	(4.5)
Maintenance Capital Costs	(5.1)	(5.2)	(5.3)	(5.4)	(5.5)	(5.6)	(5.7)	(5.9)	(6.0)	(9.1)
Net Cash Outflows	(47.0)	(46.0)	(47.1)	(51.4)	(50.7)	(51.5)	(56.1)	(63.0)	(62.4)	(52.4)
Net Cash Flows	(40.1)	(39.0)	(39.9)	(44.1)	(43.3)	(43.9)	(48.4)	(55.1)	(54.3)	(43.9)

Total Undiscounted Cash Flows	(1,395)
Net Present Value	(759)

Key Assumptions:

Cash Flow Item	Description
Airport Operating Cash Flows (+)	- Represents net cash flows generated by the airport that would be retained by the Government. Cash flows have been forecasted under the no revenue growth scenario. Rationale for no growth scenario is that there would be no change in the commercial, operational, or management capabilities of the airport under this option and terminal would be in poor physical condition that would hinder growth. Only difference from maintain existing terminal option is that the Government would slightly increase passenger fees to recover its renovation costs.
Project Borrowing Costs (-)	- The Government would need to borrow ~\$416 million to finance the partial renovation of the airport under this option. The airport terminal renovation cost is equivalent to 60% of the renovation estimate put forward by the third party engineering firm in the 2006 Airport Master Plan representing the varying level of capital renovation. Cost also included \$23 million in maintenance capex for existing terminal
Incremental Interest Cost on Sovereign Debt (-)	- Estimated that borrowing cost for the Government would increase by 100bps as a result of credit rating downgrade. The Government would incur 100bps increase in borrowing costs across all sovereign debt once the various debt tranches matured
Incremental Hotel Tax Revenue (-)	- Under this option, Bermuda would likely have lower passenger volumes and hotel accommodation tax revenue to the government would decrease
Maintenance Capital Costs (-)	- The Government would be required to pay for maintenance costs for the airport under this option. These costs are estimated to be \$5.0 million per year based on historical capital expenditures, although the actual value could be much higher, and escalated at 5% per the Government's technical advisor analysis.

A-III. Entire Airport Renovation Staged in Phases:

- Performing airport terminal renovation in stages will continue to leave the airport terminal vulnerable to hurricanes and other storm surges which may result in significant damage to the airport as the existing terminal is located directly adjacent the shore and has limited storm surge protection. The cost of repairing these damages will be borne by the Government and these cash outflows could be significant.
- Option would result in large disturbances in airport operations, which could reduce number of flights and overall passengers thereby reducing revenues to the Government.
- The Government would continue to incur significant maintenance expenditures on the non-renovated parts of the terminal until they are appropriately renovated.
- Airport would continue to be operated under the “status quo” which will not result in an upward shift in traffic levels. All else being equal, the Government will generate lower revenues as a result of lower passenger volumes from ancillary taxes such as the hotel accommodation tax.

- Difficult to increase non-aeronautical/concession revenues, as existing terminal footprint will likely remain unchanged. As a result, it will be difficult to recover the cost of the terminal renovations as concessions revenues will be the same level as under the non-renovated terminal.
- Any expansion of the existing terminal footprint under this option would require significant construction and would put this option in a similar category as a new terminal build.

Financial Analysis – Airport Renovation Staged in Phases

Illustrative Net Present Value Analysis – Airport Renovation Staged in Phases (\$ millions)										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2046
Cash Inflows										
Airport Operating Cash Flows	15.2	14.9	14.9	15.3	15.7	16.1	16.5	17.0	17.4	35.3
Net Cash Inflows	15.2	14.9	14.9	15.3	15.7	16.1	16.5	17.0	17.4	35.3
Cash Outflows										
Project Borrowing Costs	(63.3)	(62.0)	(60.7)	(59.4)	(58.1)	(56.7)	(55.4)	(54.1)	(52.8)	(25.2)
Incr. Interest Costs on Sovereign Debt	(2.4)	(2.4)	(4.2)	(9.2)	(9.2)	(10.6)	(15.9)	(23.4)	(23.4)	(23.4)
Maintenance Capital Costs	(5.1)	(5.2)	(5.3)	(5.4)	(5.5)	(5.6)	(5.7)	(5.9)	(6.0)	(9.1)
Net Cash Outflows	(70.8)	(69.6)	(70.2)	(74.0)	(72.8)	(73.0)	(77.0)	(83.3)	(82.1)	(57.6)
Net Cash Flows	(55.6)	(54.7)	(55.3)	(58.6)	(57.1)	(56.9)	(60.5)	(66.4)	(64.7)	(22.3)
Total Undiscounted Cash Flows	(1,422)									
Net Present Value	(838)									

Key Assumptions:

Cash Flow Item	Description
Airport Operating Cash Flows (+)	- Represents net cash flows generated by the airport that would be retained by the Government. Cash flows have been forecasted under the low growth scenario. Rationale for low growth scenario is that there significantly renovated and updated terminal would likely lead to modest increase in passenger traffic. It is also assumed that as part of this option, the Government increased passenger fees to recover its renovation costs.
Project Borrowing Costs (-)	- The Government would need to borrow ~\$693 million to finance the partial renovation of the airport under this option. The airport terminal renovation cost is equivalent to 100% of the renovation estimate put forward by the third party engineering firm in the 2006 Airport Master Plan. Cost also included \$23 million in maintenance capex for existing terminal
Incremental Interest Cost on Sovereign Debt (-)	- Estimated that borrowing cost for the Government would increase by 100bps as a result of credit rating downgrade. The Government would incur 100bps increase in borrowing costs across all sovereign debt once the various debt tranches matured
Maintenance Capital Costs (-)	- The Government would be required to pay for maintenance costs for the airport under this option. These costs are estimated to be \$5.0 million per year based on historical capital expenditures, although the actual value would likely be much higher, and escalated at 5% per the Government's technical advisor analysis.

B. External Options - Public Sector Collaborations with Private Partner

B-I. Government Financed Design/Build plus separate Operations and Management Lease

- Under this option, the Government is effectively raising all the capital for the project and is receiving a lease fee from a third party, which will operate the airport and collect all revenues. Under this structure, the Government is protected from downside risk in airport operations; however, it does not receive any of the upside, as there is no revenue sharing mechanism.
- The Government would not benefit from construction management expertise brought by private sector entity and would be exposed to construction price risk as it would likely not receive a fixed price guarantee.
 - In the event the Government did receive a fixed price guarantee under this option, the construction price would be much higher as the contractor is not involved in the operations and management of the airport going forward and does not have other means to compensate for cost overruns.
- To finance the design and construction of the airport terminal under this option, the Government would be required to borrow the funds, which would result in a direct cost through interest and fees on the new debt raised.
- Incremental debt associated with the design and construction of the new terminal would put further pressure on the Government's sovereign credit rating, which would increase the overall borrowing costs on all of its debt. Specifically, when the Government refinances its current debt when it matures, the Government will pay higher interest costs.

Financial Analysis – Government Build/Operations & Management Lease

Illustrative Net Present Value Analysis – Government Build/Operations & Management Lease (\$ millions)										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2046
Cash Inflows										
Lease Revenue	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.9	6.0	9.1
Incr. Hotel Accommodation Tax	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Net Cash Inflows	5.9	6.4	6.7	7.0	7.3	7.6	7.9	8.3	8.6	13.1
Cash Outflows										
Project Borrowing Costs	(50.8)	(49.7)	(48.7)	(47.6)	(46.6)	(45.5)	(44.4)	(43.4)	(42.3)	(20.2)
Incr. Interest Costs on Sovereign Debt	(2.4)	(2.4)	(4.2)	(9.2)	(9.2)	(10.6)	(15.9)	(23.4)	(23.4)	(23.4)
BAA Operating Costs	(3.6)	(3.6)	(3.7)	(3.8)	(3.9)	(3.9)	(4.0)	(4.1)	(4.2)	(6.3)
Maintenance Capital Costs	(5.1)	(5.2)	(5.3)	(5.4)	(5.4)	(5.6)	(5.7)	(5.9)	(6.0)	(9.1)
Net Cash Outflows	(61.8)	(61.0)	(61.9)	(66.0)	(65.1)	(65.7)	(70.1)	(76.7)	(75.8)	(59.0)
Net Cash Flows	(56.0)	(54.5)	(55.2)	(59.0)	(57.8)	(58.1)	(62.1)	(68.4)	(67.2)	(45.8)
Total Undiscounted Cash Flows	(1,719)									
Net Present Value	(953)									

Key Assumptions:

Cash Flow Item	Description
Lease Revenue (+)	- The Government would receive an annual lease fee from the airport operator for the right to operate the airport and collect all revenues. This has been estimated at \$5.0 million per year escalated by inflation
Incremental Hotel Tax Revenue (+)	- With an experienced airport operator, the Government would earn additional tax revenues from tourists compared to the scenario where the Government continued to operate the airport. Specifically, passenger traffic would be higher with a private entity operating the airport which will lead to higher accommodation tax revenues compared to the status quo
Project Borrowing Costs (-)	- The Government would need to borrow ~\$575 million to finance the development of the airport under this option. The airport terminal development cost is equivalent to the proposal put forward by the third party engineering firm in the 2008 Airport Master Plan (\$514 million escalated by 2% inflation to 2016 less value engineering initiatives leading to a 10% reduction in cost. Cost also included \$20 million in development costs \$23 million in maintenance capex

	for existing terminal). <i>Note: Under the Design-Build-Operate option, the correct development cost to use is the third party engineering firm cost and not the proposal put forward by the Aecon. consortium as this was the original estimate the Government received when it engaged the private market under a design-build structure</i>
Incremental Interest Cost on Sovereign Debt (-)	- Estimated that borrowing cost for the Government would increase by 100bps as a result of credit rating downgrade. The Government would incur 100bps increase in borrowing costs across all sovereign debt once the various debt tranches matured
BAA Annual Costs (-)	- The Government would be required to set up at BAA to regulate the operations of a Project Co. The cost of the BAA has been estimated at \$3.5 million per year escalated by inflation.
Maintenance Capital Costs (-)	- The Government would be required to pay for maintenance capital costs for the airport under this option. This has been estimated at \$5.0 million per year based on historical capital expenditures escalated by inflation

B-II. Design Build Finance Operate

- The Government would no longer receive the net cash flows generated by the airport during the term of the concession; however, the Government would benefit indirectly from higher traffic levels

Financial Analysis – Design Build Finance Operate Option (Competitive Tender)

Illustrative Net Present Value Analysis – DBFOM Competitive Tender (\$ millions)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2046
Cash Inflows										
Incr. Hotel Accommodation Tax	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Net Cash Inflows	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Cash Outflows										
Retained Government Services	(9.0)	(9.2)	(9.3)	(9.5)	(9.7)	(9.9)	(10.1)	(10.3)	(10.5)	(15.9)
BAA Operating Costs	(3.6)	(3.6)	(3.7)	(3.8)	(3.9)	(3.9)	(4.0)	(4.1)	(4.2)	(6.3)
Tax Concessions	(50.0)	-	-	-	-	-	-	-	-	-
Energy Subsidy	(2.7)	(2.7)	(2.8)	(2.8)	(2.9)	(2.9)	(3.0)	(3.0)	(3.1)	(4.7)
Incr. Interest Cost on Sovereign Debt	(0.6)	(0.6)	(1.1)	(2.3)	(2.3)	(2.7)	(4.0)	(5.8)	(5.8)	(5.8)
Net Cash Outflows	(65.8)	(16.1)	(16.9)	(18.4)	(18.8)	(19.4)	(21.1)	(23.3)	(23.6)	(32.8)
Net Cash Flows	(65.0)	(14.9)	(15.5)	(16.9)	(17.0)	(17.4)	(18.9)	(20.9)	(21.0)	(28.7)
Total Undiscounted Cash Flows	(733)									
Net Present Value	(393)									

Key Assumptions:

Cash Flow Item	Description
Incremental Hotel Tax Revenue (+)	- With an experienced airport operator, the Government would earn additional tax revenues from tourists compared to the scenario where the Government continued to operate the airport. Specifically, passenger traffic would be higher with a private entity operating the airport which will lead to higher accommodation tax revenues compared to the status quo
Retained Government Services (-)	- Under this option, the Government would assume the retained government services similar to the G2G approach to make the deal financially viable. The Government would be required to pay for certain airport operating expenses (i.e. ATC, meteorological, ground electronics, ARFF). This has been estimated at \$8.8 million per year escalated by inflation
BAA Annual Costs (-)	- The Government would be required to set up an BAA to regulate the operations of Project Co. The cost of the BAA has been estimated at \$3.5 million per year escalated by inflation
Tax Concessions (-)	- Under this option, the Government is assumed to grant the same tax concessions as under the G2G option. The value of these concessions has been estimated at \$50 million and have been presented at the beginning of the Project
Energy Subsidy (-)	- Under this option, the Government is assumed to assume the airport's energy consumption expense similar to the G2G approach to make the deal financially viable the Government would be required to pay for annual energy costs for the airport under this option. This has been estimated at \$2.6 million per year escalated by inflation
Incremental Interest Cost on Sovereign Debt (-)	- Estimated that borrowing cost for the Government would increase by 25bps as a result of either credit rating or outlook downgrade based on assumption of contingent liabilities from the revenue guarantee. The Government would incur 25bps increase in borrowing costs across all sovereign debt once the debt tranches mature

Financial Analysis – Design Build Finance Operate Option (government-to-government)

Illustrative Net Present Value Analysis – DBFOM government-to-government (\$ millions)

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2046</u>
Cash Inflows										
Incr. Hotel Accommodation Tax	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Net Cash Inflows	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Cash Outflows										
Retained Government Services	(9.0)	(9.2)	(9.3)	(9.5)	(9.7)	(9.9)	(10.1)	(10.3)	(10.5)	(15.9)
BAA Operating Costs	(3.6)	(3.6)	(3.7)	(3.8)	(3.9)	(3.9)	(4.0)	(4.1)	(4.2)	(6.3)
Tax Concessions	(50.0)	-	-	-	-	-	-	-	-	-
Energy Subsidy	(2.7)	(2.7)	(2.8)	(2.8)	(2.9)	(2.9)	(3.0)	(3.0)	(3.1)	-
Net Cash Outflows	(65.2)	(15.5)	(15.8)	(16.1)	(16.5)	(16.8)	(17.1)	(17.5)	(17.8)	(22.3)
Net Cash Flows	(64.4)	(14.3)	(14.4)	(14.6)	(14.7)	(14.8)	(14.9)	(15.1)	(15.2)	(18.2)
Total Undiscounted Cash Flows	(567)									
Net Present Value	(317)									

Key Assumptions:

Cash Flow Item	Description
Incremental Hotel Tax Revenue (+)	- With an experienced airport operator, the Government would earn additional tax revenues from tourists compared to the scenario where the Government continued to operate the airport. Specifically, passenger traffic would be higher with a private entity operating the airport which will lead to higher accommodation tax revenues compared to the status quo
Retained Government Services (-)	- The Government would be required to pay for certain airport operating expenses (i.e. ATC, meteorological, ground electronics, ARFF) under this option. This has been estimated at \$8.8 million per year escalated by inflation
BAA Annual Costs (-)	- The Government would be required to set up at BAA to regulate the operations of Project Co. The cost of the BAA has been estimated at \$3.5 million per year escalated by inflation
Tax Concessions (-)	- The Government has granted several tax concessions to Project Co. The value of these concessions has been estimated at \$50 million and have been presented at the beginning of the Project
Energy Subsidy (-)	- The Government would be required to pay for annual energy costs for the airport under this option. This has been estimated at \$2.6 million per year escalated by inflation

B-III. Design Build Operate

- Under this option, the Government is effectively raising all the capital for the project; however, it is receiving none of the benefits as all airport revenues are directed to a third party concessionaire. As a result, the Government is incurring all the liabilities of construction, but receiving no cash flows in order to repay the debt.
 - The Government would no longer receive the net cash flows generated by the airport during the term of the concession; however, the Government would benefit indirectly from higher traffic levels
 - The Government would be required to borrow the funds to finance the airport terminal redevelopment which would result in a direct cost through interest and fees on the new debt raised
 - Incremental debt associated with the airport terminal development would put further pressure on the Government's sovereign credit rating, which would increase the overall borrowing costs on all of its debt. Specifically, when the Government refinances its current debt when it matures, the Government will pay higher interest costs.
- Private sector is not properly incentivized to drive higher traffic volumes, as it is not an equity shareholder in the concession. This relationship may translate into lower than anticipated tax revenues for the Government through ancillary taxes such as the hotel occupancy tax relative to DBFOM model.

Financial Analysis – Design Build Operate Option

Illustrative Net Present Value Analysis – Design Build Operate (\$ millions)

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2046</u>
Cash Inflows										
Incr. Hotel Accommodation Tax	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Net Cash Inflows	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Cash Outflows										
Project Borrowing Costs	(50.8)	(49.7)	(48.7)	(47.6)	(46.6)	(45.5)	(44.4)	(43.4)	(42.3)	(20.2)
Incr. Interest Costs on Sovereign Debt	(2.4)	(2.4)	(4.2)	(9.2)	(9.2)	(10.6)	(15.9)	(23.4)	(23.4)	(23.4)
BAA Operating Costs	(3.6)	(3.6)	(3.7)	(3.8)	(3.9)	(3.9)	(4.0)	(4.1)	(4.2)	(6.3)
Tax Concessions	(50.0)	-	-	-	-	-	-	-	-	-
Net Cash Outflows	(107)	(55.8)	(56.6)	(60.6)	(59.6)	(60.0)	(64.3)	(70.8)	(69.9)	(49.9)
Net Cash Flows	(106)	(54.5)	(55.2)	(59.0)	(57.8)	(58.1)	(62.1)	(68.4)	(67.2)	(45.8)
Total Undiscounted Cash Flows	(1,769)									
Net Present Value	(1,001)									

Key Assumptions:

Cash Flow Item	Description
Incremental Hotel Tax Revenue (+)	- With an experienced airport operator, the Government would earn additional tax revenues from tourists compared to the scenario where the Government continued to operate the airport. Specifically, passenger traffic would be higher with a private entity operating the airport which will lead to higher accommodation tax revenues compared to the status quo
Project Borrowing Costs (-)	- The Government would need to borrow ~\$575 million to finance the development of the airport under this option. The airport terminal development cost is equivalent to the proposal put forward by the third party engineering firm in the 2008 Airport Master Plan (\$514 million escalated by 2% inflation to 2016 less value engineering initiatives leading to a 10% reduction in cost. Cost also included \$20 million in development costs \$23 million in maintenance capex for existing terminal). <i>Note: Under the Design-Build-Operate option, the correct development cost to use is the third party engineering firm cost and not the proposal put forward by the Aecon. consortium as this was the original estimate the Government received when it engaged the private market under a design-build structure</i>
Incremental Interest Cost on Sovereign Debt (-)	- Estimated that borrowing cost for the Government would increase by 100bps as a result of credit rating downgrade. The Government would incur 100bps increase in borrowing costs across all sovereign debt once the various debt tranches matured
BAA Annual Costs (-)	- The Government would be required to set up at BAA to regulate the operations of Project Co. The cost of the BAA has been estimated at \$3.5 million per year escalated by inflation
Tax Concessions (-)	- Under this option, the Government is assumed to grant the same tax concessions as under the G2G option. The value of these concessions has been estimated at \$50 million and have been presented at the beginning of the Project

B-IV. Design Build

- Under this option, the Government is raising all the capital for the project and continuing to operate the airport. As a result, the Government will have a new terminal; however, it will continue to be operated under the existing operational model, which will not result in higher traffic levels and the associated benefits to the Government, both direct and indirect.
- The Government would be required to borrow the funds to finance the airport terminal redevelopment, which would result in a direct cost through interest and fees on the new debt raised.
- Incremental debt associated with the airport terminal development would put further pressure on the Government's sovereign credit rating, which would increase the overall borrowing costs on all of its debt. Specifically, when the Government refinances its current debt when it matures, the Government will pay higher interest costs.

Financial Analysis – Design Build Option

Illustrative Net Present Value Analysis – Design Build (\$ millions)										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2046
Cash Inflows										
Airport Operating Cash Flows	8.8	7.9	7.7	8.0	8.2	8.6	8.9	9.3	9.7	28.8
Net Cash Inflows	8.8	7.9	7.7	8.0	8.2	8.6	8.9	9.3	9.7	28.8
Cash Outflows										
Project Borrowing Costs	(50.8)	(49.7)	(48.7)	(47.6)	(46.6)	(45.5)	(44.4)	(43.4)	(42.3)	(20.2)
Incr. Interest Costs on Sovereign Debt	(2.4)	(2.4)	(4.2)	(9.2)	(9.2)	(10.6)	(15.9)	(23.4)	(23.4)	(23.4)
Maintenance Capital Costs	(5.1)	(5.2)	(5.3)	(5.4)	(5.4)	(5.6)	(5.7)	(5.9)	(6.0)	(9.1)
Net Cash Outflows	(58.3)	(57.3)	(58.2)	(62.)	(61.3)	(61.7)	(66.0)	(72.6)	(71.7)	(52.6)
Net Cash Flows	(49.5)	(49.4)	(50.5)	(54.2)	(53.1)	(53.2)	(57.1)	(63.3)	(62.0)	(23.8)
Total Undiscounted Cash Flows	(1,369)									
Net Present Value	(797)									

Key Assumptions:

Cash Flow Item	Description
Airport Operating Cash Flows (+)	- Represents net cash flows generated by the airport that would be retained by the Government. Cash flows have been forecasted under the low growth scenario based on the traffic forecast developed by an international traffic forecasting firm. Rationale for low growth scenario is that there would be no change in the commercial, operational, or management capabilities of the airport under this option; therefore, only a modest increase in traffic levels is assumed.
Project Borrowing Costs (-)	- The Government would need to borrow ~\$575 million to finance the development of the airport under this option. The airport terminal development cost is equivalent to the proposal put forward by the third party engineering firm in the 2008 Airport Master Plan (\$514 million escalated by 2% inflation to 2016 less value engineering initiatives leading to a 10% reduction in cost. Cost also included \$20 million in development costs \$23 million in maintenance capex for existing terminal). <i>Note: Under the Design-Build option, the correct development cost to use is the third party engineering firm cost and not the proposal put forward by the Aecon consortium as this was the original estimate the Government received when it engaged the private market under a design-build structure</i>
Incremental Interest Cost on Sovereign Debt (-)	- Estimated that borrowing cost for the Government would increase by 100bps as a result of credit rating downgrade. The Government would incur 100bps increase in borrowing costs across all sovereign debt once the various debt tranches matured
Maintenance Capital Costs (-)	- The Government would be required to pay for maintenance capital costs for the airport under this option. This has been estimated at \$5.0 million per year based on historical capital expenditures escalated by inflation

B-V. Design Build; Fee for Service (Operational Model)

- Under this option, the Government is raising all the capital for the project; however, it retains a third party to operate the airport under a “fee for service” model (e.g. Vantage Group). As a result, the Government will have a new terminal and an experienced firm operating the airport
- Private sector is paid to operate the airport; however, there is no incentive for the third party operator to fully maximize revenues as they are paid a fixed service fee to operate the airport and do not share in the upside.
 - As a result, traffic volumes may not materially increase from today’s levels, which will lead to lower benefits, direct and indirect, to the Government.
- From a financial perspective:
 - The Government would be required to borrow the funds to finance the airport terminal redevelopment which would result in a direct cost through interest and fees on the new debt raised
 - Incremental debt associated with the airport terminal development would put further pressure on the Government’s sovereign credit rating, which would increase the overall borrowing costs on all

of its debt. Specifically, when the Government refinances its current debt when it matures, the Government will pay higher interest costs.

- Additional costs associated with paying third party operator, which will increase operating expenses.

Financial Analysis – Design Build; Fee for Service Option

Illustrative Net Present Value Analysis – Design Build; Fee for Service Option (\$ millions)										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2046
Cash Inflows										
Airport Operating Cash Flows	13.0	14.0	14.6	15.7	16.9	18.1	19.3	20.6	22.0	47.6
Incr. Hotel Accommodation Tax	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Net Cash Inflows	13.8	15.2	16.0	17.3	18.7	20.1	21.5	23.0	24.6	51.7
Cash Outflows										
O&M Management Fee	(5.1)	(5.2)	(5.3)	(5.4)	(5.5)	(5.6)	(5.7)	(5.9)	(6.0)	(9.1)
Project Borrowing Costs	(50.8)	(49.7)	(48.7)	(47.6)	(46.6)	(45.5)	(44.4)	(43.4)	(42.3)	(20.2)
Incr. Interest Costs on Sovereign Debt	(2.4)	(2.4)	(4.2)	(9.2)	(9.2)	(10.6)	(15.9)	(23.4)	(23.4)	(23.4)
Maintenance Capital Costs	(5.1)	(5.2)	(5.3)	(5.4)	(5.4)	(5.6)	(5.7)	(5.9)	(6.0)	(9.1)
Net Cash Outflows	(63.4)	(62.5)	(63.5)	(67.6)	(66.8)	(67.4)	(71.8)	(78.5)	(77.6)	(61.7)
Net Cash Flows	(49.6)	(47.3)	(47.5)	(50.3)	(48.1)	(47.3)	(50.3)	(55.4)	(53.0)	(10.0)
Total Undiscounted Cash Flows	(1,110)									
Net Present Value	(675)									

Key Assumptions:

Cash Flow Item	Description
Airport Operating Cash Flows (+)	- Represents net cash flows generated by the airport that would be retained by the Government. Cash flows have been forecasted under the base growth scenario based on the traffic forecast developed by an international traffic-forecasting firm. Rationale for base growth scenario is that the third party operator would change the commercial, operational, or management capabilities of the airport; therefore, a more robust increase in traffic levels is assumed.
Incremental Hotel Tax Revenue (+)	- With an experienced airport operator, the Government would earn additional tax revenues from tourists compared to the scenario where the Government continued to operate the airport. Specifically, passenger traffic would be higher with a private entity operating the airport which will lead to higher accommodation tax revenues compared to the status quo
O&M Management Fee (-)	- The Government would need to pay a facility management service provider an annual fee for operating the airport. This has been estimated at \$5.0 million per year escalated by inflation
Project Borrowing Costs (-)	- The Government would need to borrow ~\$575 million to finance the development of the airport terminal under this option. The airport terminal development cost is equivalent to the proposal put forward by the third party engineering firm in the 2008 Airport Master Plan (\$514 million escalated by 2% inflation to 2016 less value engineering initiatives leading to a 10% reduction in cost. Cost also included \$20 million in development costs \$23 million in maintenance capex for existing terminal). <i>Note: Under the Design-Build Fee for Service option, the correct development cost to use is the third party engineering firm cost and not the proposal put forward by the Aecon. consortium as this was the original estimate the Government received when it engaged the private market under a design-build structure</i>
Incremental Interest Cost on Sovereign Debt (-)	- Estimated that borrowing cost for the Government would increase by 100bps as a result of credit rating downgrade. the Government would incur 100bps increase in borrowing costs across all sovereign debt once the various debt tranches matured
Maintenance Capital Costs (-)	- The Government would be required to pay for maintenance capital costs for the airport under this option. This has been estimated at \$5.0 million per year based on historical capital expenditures escalated by inflation

C. External Option - Private Sector Alone

C.I. Privatization

- The Government would have to sell and assign all proprietary right, title and interest in all of the airport's lands and buildings to the private sector.
- The Government would effectively yield control of the airport to a third party as there would be no requirement to transfer back the asset after a pre-determined period of time. As a result, the Government would no longer have direct control over the main/sole gateway into the Government, which is a critical component of its economy and society, and a costly regulatory regime would have to be created and managed to ensure that the public interest is protected.
- From a financial perspective:
 - The Government would no longer receive the net cash flows generated by the airport
 - Airport is not transferred back to the Government at a given point; therefore, the Government loses the implied net present value of all cash flows after the concession date when compared to the DBFOM option
- The Government may share in the upside cash flows of the airport on a royalty basis (reflecting various possible sharing mechanisms under this option).

Financial Analysis – Privatization Option

Illustrative Net Present Value Analysis – Privatization (\$ millions)										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2046
Cash Inflows										
Incr. Hotel Accommodation Tax	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Net Cash Inflows	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Cash Outflows										
Retained Government Services	(9.0)	(9.2)	(9.3)	(9.5)	(9.7)	(9.9)	(10.1)	(10.3)	(10.5)	(15.9)
BAA Operating Costs	(3.6)	(3.6)	(3.7)	(3.8)	(3.9)	(3.9)	(4.0)	(4.1)	(4.2)	(6.3)
Tax Concessions	(50.0)	-	-	-	-	-	-	-	-	-
Energy Subsidy	(2.7)	(2.7)	(2.8)	(2.8)	(2.9)	(2.9)	(3.0)	(3.0)	(3.1)	(4.7)
Incr. Interest Cost on Sovereign Debt	(0.6)	(0.6)	(1.1)	(2.3)	(2.3)	(2.7)	(4.0)	(5.8)	(5.8)	(5.8)
Net Cash Outflows	(65.8)	(16.1)	(16.9)	(18.4)	(18.8)	(19.4)	(21.1)	(23.3)	(23.6)	(32.8)
Net Cash Flows	(65.0)	(14.9)	(15.5)	(16.9)	(17.0)	(17.4)	(18.9)	(20.9)	(21.0)	(28.7)
Total Undiscounted Cash Flows	(733)									
Net Present Value	(393)									

Key Assumptions:

Cash Flow Item	Description
Incremental Hotel Tax Revenue (+)	- With an experienced airport operator, the Government would earn additional tax revenues from tourists compared to the scenario where the Government continued to operate the airport. Specifically, passenger traffic would be higher with a private entity operating the airport which will lead to higher accommodation tax revenues compared to the status quo
Retained Government Services (-)	- Under this option, the Government would assume the retained government services similar to the G2G approach to make the deal financially viable. The Government would be required to pay for certain airport operating expenses (i.e. ATC, meteorological, ground electronics, ARFF). This has been estimated at \$8.8 million per year escalated by inflation
BAA Annual Costs (-)	- The Government would be required to set up an BAA to regulate the operations of Project Co. The cost of the BAA has been estimated at \$3.5 million per year escalated by inflation
Tax Concessions (-)	- Under this option, the Government is assumed to grant the same tax concessions as under the G2G option. The value of these concessions has been estimated at \$50 million and have been presented at the beginning of the Project
Energy Subsidy (-)	- Under this option, the Government is assumed to assume the airport's energy consumption expense to make the deal financially viable. The Government would be required to pay for

	annual energy costs for the airport under this option. This has been estimated at \$2.6 million per year escalated by inflation
Incremental Interest Cost on Sovereign Debt (-)	- Estimated that borrowing cost for the Government would increase by 25bps as a result of either credit rating or outlook downgrade based on assumption of contingent liabilities from the revenue guarantee. The Government would incur 25bps increase in borrowing costs across all sovereign debt once the debt tranches mature

Section III. Airport Revitalization Option Conclusion:

Public Policy Objectives:

To innovatively formulate and structure a customized variation of the "design, build and operate" options that must achieve the following "value for money" objectives in the Government's public interest:

1. Ensure an airport terminal that: remediates all current health and safety issues; is environmentally safe and secure, and is of a quality and design that will enhance passenger experience and that is accretive to Bermuda's brand and reputation.
2. Create a much more environmentally sustainable, efficient and cost effective airport facility that will consume much less fresh water and much less energy.
3. Stimulate the Bermudian economy and maximize employment.
4. Secure a redeveloped airport terminal that will only require minimal ongoing Government expenditures.
5. Secure a redeveloped airport terminal that will not require any Government capital investment.
6. Secure a redeveloped airport terminal that will not require any third party Government financial guarantees.
7. Shift the material commercial and financial risks of the airport's operations to the private sector.
8. Ensure airport operations are undertaken and managed by an internationally respected expert in such commercial enterprises.
9. Ensure the airport operated is incentivized/motivated to market and promote Bermuda as a travel destination for tourists and business travelers.
10. Maintain full Government control over certain critical airport infrastructure in the public interest, such as Air Traffic Control and Emergency Response (Fire & Rescue).
11. Ensure that the airport's operations will be governed by both a dedicated regulatory authority and a comprehensive management contract that will contain "market standard" terms and conditions, including risk management rights and remedial protections.
12. Will increase (maximize) long term commercial opportunities for Bermudian owned businesses at the airport, such as retail, food & beverage and other value-add services.
13. Secure a "fixed price/design specific" airport terminal construction contractual "guarantee" from an AAA credit rated entity to build the airport "on time, on spec and on budget".
14. Avoid any sale, assignment or transfer of Bermuda land, buildings or real estate.
15. Provide protection to the Government against excessive airport operations profits by the private sector (allow Bermuda's direct participation in same).

Proposed Customized P3 Model/Transaction Structure:

Therefore, based on all of the foregoing airport terminal revitalization options and the foregoing public policy objectives and priorities, the following innovative transaction structure (only summarily described herein) has been formulated:

- Canada is the only G20 Government in the world that will provide public sector purchasers of goods and service from Canada (AAA credit rating) with a contractual guarantee for the construction and delivery of a new airport terminal “on time, on spec, and fixed cost budget”.
- Government of Canada, through the Canadian Commercial Corporation, will partner with Canada’s largest publicly traded (and regulated) construction and concession enterprise to design, build and operate the airport.
- The existing airport terminal will be expeditiously renovated to address immediate environmental, health, safety and hazardous condition compliance matters.
- All of the above noted public policy objectives will be achieved as an inherent part of the governing contractual arrangements, including stipulations to maximize the use of Bermudian labour for both the construction and operations phases of the Project.
- The financial model will avoid all capital expenditures by the Government to build the airport terminal, and will require the private sector to build the airport terminal at its cost and expense by recouping those costs over a thirty (30) year concession term.
- The performance and delivery of all airport management and operations services will be governed and overseen by a dedicated regulatory authority on behalf of the Government, and that authority will have both statutory and contractual remedial rights to promote the prudent and compliant operation of the airport and its operations.

Upon any failure of the Project, the Government will have aggressive “step-in” rights to take over full possession and control of the airport.

L.F. Wade Airport Redevelopment Project

Overall Business Case - Entrustment Report

Appendix 4 – Optimism Bias

**Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda**

The purpose of this appendix is to consider any optimism bias that should be considered in the evaluation of the Project.

In project assessments, there is a demonstrated and systematic tendency for project appraisers to be overly optimistic and to understate timing and costs. The Project is a complex undertaking that requires significant resources and expertise to implement successfully. The effect of under-estimation of costs, especially under a government-delivery approach should be noted.

Section I. Government of Bermuda Project Delivery Experience:

Historically, traditional procurement practices have been used in Bermuda for major capital projects. However, there is evidence that indicates the Government of Bermuda (the “Government”) has a poor record in delivering projects on time and on budget.

An independent diagnostic review conducted by KPMG in 2010 on the Government's development and implementation of capital projects, identified deficiencies in the project delivery for half of the projects reviewed. A sample of six projects were reviewed, three of which did not comply with Government policy and procedures for capital project development, procurement, or management. Comments were made that virtually every significant major capital project in recent years has been over budget. Two of the six projects reviewed were significant projects (over \$10 million) and both projects (Cruise Pier, and Hamilton Police Station and Magistrates Court) had significant cost overruns. Further details are provided below:

Cruise Pier

The project was to develop and construct a second cruise pier at Dockyard. The initial contract cost was \$34.1 million and the final cost amounted to \$59.1 million, a 73% cost overrun. P3 options were considered for this project, however Cabinet proceeded using government funding. There were 33 contract variances, the largest of which was \$2.2 million for the strengthening of the thruster wall.

Hamilton Police Station and Magistrates Court

The project was to develop and construct a new building to house the Hamilton Police Station and Magistrates Court as well as to provide offices for other Government departments. The project advanced prematurely, using a design that was out of date and as a result, change orders were required when there was no competitive pressure. The initial cost was estimated to be \$71.9 million. With the required change orders, fit-up costs and contingencies, the final cost was estimated to exceed \$93 million, or an overrun of 29%.

One of the first P3 projects undertaken by the Government was the King Edward VII Memorial Hospital. Paget Health Services (“PHS”) was selected as the private partner to the Bermuda Hospitals Board, and construction commenced in 2011. The project included a redevelopment of the existing building (\$55 million), and construction of a new wing (\$247 million). The project was designed using the Canadian P3 procurement framework. PHS designed, constructed, and is operating, and maintaining the hospital over a 30-year period. It was reported that the cost of the project as a P3 was less than anticipated by the Bermuda Hospital Board. The project was structured as a P3 and cost overrun risks were transferred to the private sector.

Section II. Impact of Optimism Bias:

To quantify the effect of optimism bias, cost adjustments to account for cost under-estimation can be added to the "base" cost estimates. These optimism bias cost adjustments represent the potential for out-turn costs to be higher than the original planned/budgeted costs.

In the UK Green Book Supplementary Guidance on Optimism Bias ("Green Book Guidance"), an adjustment for upper bound capital expenditures for a non-standard building project (such as an airport terminal) is suggested to be 51%. The upper bound percentage adjustment can be used as a starting point and be reduced based on mitigation factors.

For each of the options examined in Appendix 3, an analysis has been conducted to determine the applicable mitigation factors. Determination of the mitigation factors were based on various considerations such as project complexity, project implementation issues, and risk sharing mechanisms. A mitigation factor ("MF") of 0 (zero) means no effective mitigation is applicable and a factor of 1.0 means all risk can be mitigated. Results of this analysis are presented in the table below.

Option	Basis for Mitigation Factor	MF
A-I. Maintain airport at current levels	<ul style="list-style-type: none"> • Minimal upfront capital expenditures • Relatively simple projects, if any • No change in airport governance and operation model • However, poor government track record in risk mitigation 	0.35
A-II. Varying degrees of capital renovation	<ul style="list-style-type: none"> • Relatively simple projects and contracts, although some risks in projects fitting together • No change in airport governance and operation model • Poor government track record in risk mitigation 	0.30
A-III. Entire airport renovation staged in phases	<ul style="list-style-type: none"> • Complex overall project • No change in airport governance and operation model • Poor government track record in risk mitigation 	0.20
B-I. Government rebuilds airport at its expense and outsources facility O&M	<ul style="list-style-type: none"> • Complex overall project • Change in airport operation model • Government still responsible for project delivery and exposed to cost overrun risk 	0.15
B-II. Design Build Finance Operate	<ul style="list-style-type: none"> • Complex overall project and contract • Change in airport capital project delivery approach and operation model • Risk mitigation through partnering with firms experienced in airport construction and operations • Due diligence involving private investors • Transfer of most cost overrun risk to project partner 	0.80

Option	Basis for Mitigation Factor	MF
B-III. Design Build Operate	<ul style="list-style-type: none"> • Complex overall project and contract • Change in airport capital project delivery approach and operation model • Risk mitigation through partnering with firms experienced in airport construction and operations • Transfer of most cost overrun risk to project partner 	0.65
B-IV. Design Build	<ul style="list-style-type: none"> • Complex overall project and contract • Change in airport capital project delivery approach • Risk mitigation through partnering with firms experienced in airport construction • Transfer of cost overrun risk to project partner, however potential for scope creep from issues discovered post construction 	0.65
B-V. Construction procurement: Facility management fee for service	<ul style="list-style-type: none"> • Complex overall project and contract • Change in airport capital project delivery approach and operation model • Risk mitigation through partnering with firms experienced in airport construction and operations • Transfer of most cost overrun risk to project partner, however potential for scope creep from issues discovered post construction 	0.70
C-I. Privatization	<ul style="list-style-type: none"> • Complex overall project and contract • Change in airport capital project delivery approach and operation model • Change in ownership model • Risk mitigation through partnering with firms experienced in airport construction and operations • Due diligence involving private investors • Transfer of most cost overrun risk to project partner 	0.75

The mitigation factors above are applied to the 51% cost adjustment suggested by the Green Book to arrive at indicative percentage cost adjustments to be used for each option. These percentage cost adjustments are then applied to the capital expenditures under each option to arrive at estimates of additional cost exposure to the Government under each option. It should be noted that the upfront capital costs for each option in the table below do not necessarily represent like-for-like projects. Although it is the best information available for each options, the cost estimates may differ in areas such as scope, assumptions and maturity.

Option	Percentage Capital Cost Adjustment for Optimism Bias (51% x [1- MF])	Upfront Capital Costs (\$ millions)	Cost Exposure to Government (\$ millions)
A-I. Maintain airport at current levels	33%	\$184	\$61
A-II. Varying degrees of capital renovation	36%	\$416	\$150
A-III. Entire airport renovation staged in phases	41%	\$693	\$284
B-I. Government rebuilds airport at its expense and outsources facility O&M	43%	\$575	\$247
B-II. Design Build Finance Operate (G2G)	10%	\$303 ¹	\$30
B-III. Design Build Operate	18%	\$575	\$103
B-IV. Design Build	18%	\$575	\$103
B-V. Construction procurement: Facility management fee for service	15%	\$575	\$86
C-I. Privatization	13%	n/a ²	n/a ²

Notes:

1. This figure represents capital expenditures of \$256m and including inflation, contingency costs, builder's insurance and demolition costs.

2. Although the capital costs would likely be similar to Option B-III for Option C-I, the complexities of risk transfer and retention in a privatization would be difficult to quantify. Therefore, detailed cost analysis was not carried out for option C-I.

As shown above and simply focusing on the upfront capital projects, there is significant difference in the Government's cost exposure. Among the options, the cost exposure to Government is lowest in Option B-II, reflecting the opportunity to transfer cost overrun risks to the project partner who has the experience and ability to manage those risks.

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Appendix 5 – Procurement Strategy

**Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda**

This appendix outlines the Government's considerations, requirements, and its commercial case, for its selection of a suitable P3 alliance partner to formulate and structure a customized "design, build, finance, operate and maintain" P3 that would satisfy the highly unique and challenging financial and economic challenges associated with the Project.

Successive Governments have considered the concept of P3 previously.

In 2008, the Government engaged a consultant firm to conduct an opportunity scan with respect to those capital projects within Government suitable for a P3. The redevelopment of the LF Wade was one of the projects reviewed in the scan.

At that time there was an immense scope of proposed capital development to be funded by the Government over the next several years. Projects intended included a new acute care hospital, a new L.F. Wade International Airport (the "Airport"), a new crossing of the waters of Castle Harbour and others.

Projects underway at that time included the second cruise pier at Dockyard, the Hamilton Police Station/Magistrates' Court building and various housing developments. Capital expenditure plans moving forward had been significantly adjusted owing to the fiscal burden created by the concurrent construction of these projects.

The legislative debt ceiling at that time fell well short of the required capital investment to complete all of the projected required.

One component of the current Government's strategy to changing the trajectory of deficits and debt over the medium-term is to restrict capital outlays within the range of \$55 - \$65 million. In an effort to ensure that the provision of goods and services and that much needed infrastructure improvements do not overburden the taxpayer or jeopardize Government's debt position, it is incumbent on the Government of Bermuda to explore alternative means of procuring and funding such needed capital expenditure.

The current Government has decided that any major construction project had to tick the boxes of certain criteria objectives that are as follows:

- ✓ Minimize the impact on an already over extended Government balance sheet.
- ✓ Reduce and/or eliminate the real risk of overruns and delays and heavy procurement costs.
- ✓ Address the urgency of job creation by cutting the time of procurement.
- ✓ Must ensure Government gets Value for Money

Further, the Ministry of Finance has set various debt targets. The legislative debt ceiling is \$2.5 billion. Gross debt is currently \$2.355 billion. With recurring deficits, the legislative debt ceiling falls short of the required capital investment to complete the airport.

The Government has decided to explore the use of alternative delivery means such as P3s in order to help address Bermuda's infrastructure requirements.

Section I. Procurement Strategy Objectives & Requirements:

The Government formulated the following objectives, considerations, requirements and limitations in the course of its P3 partner selection process:

- 1) The redevelopment of the Airport had to be undertaken on an expedited basis for many reasons, including: the health and safety considerations of the rapidly deteriorating

condition of the Airport; socio-economic demand for increased employment; and economic stimulation; and the detrimental impact of the Airport's poor condition on the reputation of Bermuda as a world leading business and luxury tourism jurisdiction.

- 2) The Airport terminal redevelopment project required a P3 Partner who could flexibly accommodate the unique and challenging financial circumstances associated with a continual decline in air traffic since the late 1980's, including a P3 partner with the proven ability to secure financing for the Airport redevelopment projects from the private sector in order to avoid any assumption of additional debt for the Government;
- 3) The Airport terminal redevelopment P3 partner would have to contribute to the project's financeability (investment attractiveness) in the international financial markets, through both its international commercial reputation and its excellent credit rating;
- 4) Due to the vital importance of the Airport to Bermuda's national interest, the selection of the Airport terminal redevelopment P3 partner would have to be undertaken in a manner that was superior to the Government's past competitive tendering process failures, which had resulted in so many project excessive cost over-runs; material delays and off-specification deliveries;
- 5) Given the substantial complexity of the Airport's vast number of design, environmental, regulatory, stakeholder, management, operational and safety concerns, the selected P3 partner must be willing to ensure that the Government's requirements, stipulations, specifications and mandatory project features would be collaboratively formulated, developed and created as a balanced project between Bermuda's public policy requirements and international investor expectations and requirements;
- 6) The Government's P3 partner selection process could not afford either the time delays or the tremendous expense, of undertaking a drawn-out and bureaucratic competitive tendering process (with Requests For Information, Requests for Quotations, Requests for Expressions of Interest, Requests for Proposals) only to end up being engaged (thereafter) in exactly the same lengthy project agreement formulation and negotiation process;
- 7) The P3 partner selection process must provide all the "value for money", vendor "integrity, reliability and trustworthiness", financial reasonability, and ongoing project risk management and governance assurances and oversight that other best practice procurement strategies deliver when they are successful; and,
- 8) The P3 partner selection process must comply with the laws of Bermuda, including Bermuda's constitution and Financial Instructions (to the extent possible).

Based on past experience, the Government expected that a competitive tendering process to select a P3 partner to design, build, finance, operate and maintain a new Airport would inevitably lead to a substantial Government investment (paid for with debt) and related project guarantees, which the Government could not assume without impairing its sovereign credit rating (and increasing its cost of borrowing). With inflation adjustments and engineering requirements, in 2008 the Government preliminarily determined that it may have to borrow as much as \$575 million (per the project plan in 2008) to finance the construction of a new terminal unless it found a P3 partner willing to assume the entire cost of Airport terminal construction, operation and maintenance, without the Government providing any financial guarantees.

Section II. P3 Partner Selection Process: Legal Compliance:

The Government undertook the following steps associated with its interest in expediting its selection of a P3 partner that would satisfy all of the above procurement strategy objectives:

- 1) P3 projects are not transactions where the Government procures any goods or services. P3 projects are sponsorship programs where the Government selects a P3 partner whom it will sponsor to assume certain risks associated with the redevelopment, design, building, financing and operation of the Airport by the private sector. Such strategic alliances are structured to transfer ongoing capital and operational risks for such infrastructure from the public sector to the private sector, with varying degrees of public sector financial (or other) support and contribution but not the payment of compensation or remuneration. In the case of its deliberations concerning the scope and nature of the P3 project being considered, the Ministry of Finance was not clear with regard to the applicability of Financial Instructions for the Airport terminal redevelopment P3 project as this was not a "purchasing" undertaking by the Government within the ambit of the Financial Instructions.

The Airport P3 transaction does not require CCC to provide any services to the Government, so therefore, there is no remuneration or service (or other) fees that is payable by the Government (or by any other person) to CCC. There is no remuneration payable to CCC by the Government in exchange for any service. Under the Letter of Agreement, CCC did not agree to provide the Government with any services, only that such agreement established "a protocol to facilitate and expedite the further discussion" related to the Project. The transactions contemplated under the Letter of Agreement, the ADA and the proposed Project Agreement are not compensatory payments for the procurement of either goods or services. The various Airport P3 project agreements will require the Government to assume various expenditure liabilities to support the Airport P3, but none of those expenditures accrues to either CCC or its subcontractors as a "fee for service". Therefore, the Government had difficulty in determining how the Financial Instructions prescriptions for competitive tendering to prospective "suppliers" of goods and services in the Financial Instructions would apply to the Government's selection of a P3 partner and its related expenditures.

- 2) However, notwithstanding the profound difference between the inherent nature of P3 transactions and the mere purchase of goods and services by the Government from "suppliers", the Financial Secretary asked the Accountant General of Bermuda for his permission to proceed with the Government's "incremental selection" process with the Government's then preferred P3 partner, the crown agency of the Government of Canada, the CCC, without any requirement of a competitive tendering process. That permission was granted by the Accountant General in 2014. The Account General's permission was provided on the condition that, when available, further information can be provided on CCC's fees, even at a high level, to enable an evaluation of value for money for "the services". That further information has been provided, but with the proviso and clarification that only Aecon pays for contractual services that CCC renders to Aecon as its prime contractor, as no services are ultimately directly provided to the Government by CCC.
- 3) In the course of discussions between the Government and the Foreign & Commonwealth Office of the United Kingdom ("FCO"), questions were raised by the FCO concerning whether or not the Government had followed general rules of public expenditure best practices. Those inquiries led to a joint retainer by the Government and Deloitte Ltd. ("Deloitte") to compare the P3 partner selection process to the UK government's ("HM

Treasury”) non-mandatory guidance on recommended practices for the evaluation of Public Section spending proposals (“Green Book”).

The Minister of Finance has described the role of Deloitte's investigations into the Government's Airport P3 selection process as follows in his Ministerial Statement to the House of Assembly on May 22nd, 2015:

"Mr. Speaker, in order to improve the value of this unique proposal, and recognizing the anxiety in the public domain with regard to the proposal, the Ministry of Finance, in conjunction with Her Majesty's Government in London (represented by the Foreign and Commonwealth Office (FCO)), engaged the services of Deloitte, following a competitive tendering process, to conduct an independent appraisal of the method of procurement for the redevelopment of Bermuda's airport using the CCC. The purpose of this engagement was to evaluate the business case, value for money and affordability of the existing proposal and to provide a high-level cost effectiveness opinion for the proposal being put forward. The engagement was commissioned in March 2015 and also assessed whether the existing analysis and documentation on the proposed Bermuda Airport Development was sufficient to support an investment decision based upon HM Treasury's Green Book guidance for the evaluation of public sector spending proposals.

Mr. Speaker, it is important to note that HM Treasury's Green Book's prescriptions assume a competitive bid process and that the Bermuda Government is not obliged to follow “Green Book” standards. However the Green Book guidance is some of the highest in the world with regard to public sector procurement, so we shall use the findings of the Deloitte report to enhance the project moving forward."

Deloitte submitted their final report to the Government and FCO on May 8th, 2015 prior to the execution and delivery of the ADA on August 29, 2015. In their report, Deloitte identified several Green Book recommended case reports that should be undertaken by the Government to further ensure the integrity, validity, prudence and legitimacy of its P3 partner selection process undertaken by the Government. The Airport P3 partner selection process has been enhanced by this Government's implementation of Deloitte's recommendations.

- 4) The Government requested, and secured, an Entrustment Letter dated July 17, 2015 from the Director of Overseas Territories in the FCO, which delegated authority (as described therein) to the Government to proceed to negotiate and enter into an Airport P3 redevelopment contract with CCC. With regard to the legitimacy of the Government's process to select a P3 partner, the Entrustment requested the Government to prepare the various recommended Green Book case reports that Deloitte had identified. The Government voluntarily agreed to prepare such reports, in part, to augment and better explain its P3 partner selection process.

Section III. Selection of CCC as Airport P3 Redevelopment Partner:

The following delineates the Government's reasons for its selection of CCC as its Airport P3 redevelopment partner:

- 1) The CCC's role and offering in such projects is unique around the world, and no other nation offers such a unique commercial structure for large infrastructure project development;
- 2) The CCC's (Canadian Government's) extremely high credit rating is both a high risk management consideration for the Government, and it serves to reduce the cost of project financing as well as serving to attract investors to the project;
- 3) The government-to-government nature of the project brings the unique transactional benefit of comity between jurisdictions, which is both a risk management consideration for the Government and which also brings a sense of good faith and cooperative flexibility between the partners in a manner that will more readily appreciate and accommodate Bermuda's public policy and national interest objectives;
- 4) The leadership of the CCC in the selection of its subcontractors assures the Government of the highest degree of commercial integrity and anti-corruption governance;
- 5) The CCC has recent and successful experience in providing such "prime contractor" assurance of performance obligations, i.e. the redevelopment of the award winning Mariscal Sucre International Airport (Quito);
- 6) The CCC has direct access to, and the commercial trust of, Canada's leading construction enterprises, including its Quito airport subcontractor, Aecon Group, one of Canada's largest and most highly regarded construction enterprises (listed on the TSX, Dec. 31/87);
- 7) The Government can trust the reliability and diligence of CCC's subcontractor vetting and selection process, which is described in more detail below;
- 8) More specifically, the CCC will be the counter-party that will provide the special purpose entity (Project Co) with its direct contractual assurance that (subject to normative terms and conditions) the Airport's redevelopment will occur "on time, on spec and on budget" (subject to the Project Agreement's industry normal terms and conditions), and that direct contractual assurance will also be given by the CCC to the Government in the form a direct collateral agreement that will be entered into directly between the Government and CCC. In that regard, the Letter of Agreement explains that prime contractor guarantee and assurance as follows: "CCC will constitute the Prime Contractor for the delivery of the Project's construction capital program to Bermuda on time and on budget, ensuring the Project and Bermuda benefit from the Government of Canada's guarantee to perform the contract in accordance with its terms and conditions"; and,
- 9) Although the CCC has a strong preference and discipline for both ensuring that the proposed Airport transaction follows normative international P3 commercial, legal and contracting practices, the CCC has historically demonstrated a tremendous willingness to customize and uniquely formulate the proposed transaction (within such international norms) to accommodate the unique and challenging financial and economic circumstances of the Government's it works with.

The Minister of Finance described the results of the Government's Airport P3 partner selection deliberation as follows in his Ministerial Statement to the House of Assembly on November 21st, 2014:

"Having carefully considered all its options, Government has decided to avail itself of a novel procurement model offered by way of an arrangement with the Canadian Commercial Corporation. CCC is wholly owned by the Government of Canada. The proposed transaction will take the form of a type of public private partnership, (P3), a model that will allow Bermuda to build, use and eventually take possession of the most modern of facilities for civil aviation, without any burden on the Bermuda treasury.

Some of the benefits to using the CCC approach to redevelop the Airport are as follows:

- This model cuts the procurement time dramatically, enabling shovels to be in the ground and jobs created much sooner than traditional methods.
- This model significantly reduces the cost of procurement.
- The new terminal will be customized to Bermuda's needs.
- CCC will guarantee that the project will be delivered on time and on budget.
- There will be a Canadian infrastructure developer. CCC will conduct its own due diligence to be satisfied that the Canadian developer has the technical, financial and managerial capability to deliver on the contract.
- The transactional approach will not require any initial expenditure for the airport by Bermuda, and with no new debt for Bermuda;

The model demands total transparency, adhering to international best practices; in fact, as I have already mentioned, we will ensure that there will be no recourse to the balance sheet of the Bermuda government, direct or contingent. . .

Mr. Speaker, we will also benefit from the uncompromising standards, world class experience and expertise of CCC. Established in 1946, CCC, a federal crown corporation, was mandated to facilitate international trade on behalf of Canadian industry, particularly within government markets.

CCC will select a Canadian Developer from its already preselected stable of Canadian firms. This company will enter into a contract and Concession Agreement with the Bermuda Airport Authority to develop and manage the project. Title to the airport and adjacent property will remain in Government hands. This will be the core of our unique P3 arrangement.

This company will maximize local employment in subcontracting opportunities in the selection of contracting firms to actually carry out the work on the ground. The vast majority of these subcontracting companies will be local Bermudian firms employing local labour.

Mr. Speaker, we will be engaging an independent construction firm to review the project model in all its aspects to formally verify that Bermuda is getting value for money from this arrangement.

This structure, which is tried and tested in other countries, has a number of reduction advantages:

- reducing the risk and expense of procurement,
- reducing the risk of budget overruns,
- reducing the risk of late delivery,
- reducing the risk to the Bermuda Government treasury and balance sheet,
- reducing unemployment in our island and validating value for money issues."

Section IV. Considerations Given To CCC Airport P3 Subcontractor Selection:

The Government's due diligence enquires into the CCC's selection process of its subcontractors disclosed the following information:

(1) How does CCC choose a supplier for a project:

CCC usually becomes aware of projects that might be suitable for a government-to-government contracting approach in one of two ways: either a Canadian company who is aware of the project opportunity contacts CCC or the purchasing Government contacts CCC directly about the project. Depending on who makes the request, CCC tailors its supplier selection approach.

If a Canadian company reaches out and is looking for the option of a government-to-government approach for the project, CCC:

- 1) Verifies if the company has a proven track record with CCC for projects.
- 2) Assesses the viability of the opportunity, assessing if the potential deal is a good fit for a government-to-government contracting model.
- 3) Determines whether it can support the supplier.
- 4) Screens prospective suppliers on various criteria and requires that its suppliers pass its integrity compliance and due diligence process.

CCC treats all potential opportunities on a case-by-case basis and assesses opportunities in consultation with the Canadian companies and foreign governments involved.

(2) How did CCC select the Aecon Group for the Project:

In the case of the redevelopment of the L.F. Wade International Airport in Bermuda, CCC was introduced to the potential opportunity by Aecon. CCC had recent experience with the Aecon group on a similar project for the redevelopment of the international airport in Quito, Ecuador – a project in which Aecon demonstrated its ability to deliver a complex infrastructure project in a way that was sensitive to the needs of the community while having a positive impact in the community from the perspective of employment and environmental concerns.

In addition, the Aecon Group is seen as a leader in the development of Public-Private Partnerships (P3) and has successfully partnered on over 25 P3 projects both domestically and internationally, ranging from transportation and water infrastructure, to hospital and airport development. As a strong performer in CCC's roster of Canadian companies, CCC was open working with the Aecon Group in Bermuda.

CCC participated in a meeting in June of 2014 with the Minister of Finance of Bermuda, Attorney General, representatives of the Bermuda Airport Authority and Ministry of Finance, the former General Manager of the Quito Airport, and Aecon to assess the viability of the opportunity and to determine if the project was a good fit for a government-to-government contracting model. CCC business development Directors travelled to Bermuda four times to further clarify the project and interest in exploring a government-to-government approach.

Between June and November of 2014, a Memorandum of Understanding (MOU) was negotiated and signed on Nov 10, 2014 between CCC and the Government of Bermuda as represented by the Minister of Finance. This MOU allowed for the mutual exploration of a government-to-government approach for the airport project.

(3) CCC Due Diligence on the Aecon Group:

The MOU allowed CCC to complete its own work for the formal selection of the Aecon Group as the Canadian supplier for the first phase of the project. This included completion of CCC's two-part Due Diligence process:

(i) The CCC Integrity Compliance Review

- CCC reviewed the ethical and integrity profile of the Aecon Group in the context of specific export opportunities.
- The review is designed to ensure that CCC establishes and ensures the effectiveness of internal controls, ethics and compliance measures for preventing and detecting the bribery of foreign public officials in CCC transactions.
- CCC assessed whether the Aecon Group has taken appropriate measures to prevent bribery and corruption, focusing on the company's programs, processes and systems designed to reduce the likelihood of illegal or unethical acts from occurring.

The Corporation's due diligence framework is in line with international efforts to combat bribery and corruption of foreign government officials. The Aecon Group passed the CCC Integrity Compliance Review.

(ii) The CCC Technical, Managerial and Financial Capability Assessment

- The Aecon Group provided CCC with information on its technical, managerial and financial capability to deliver on phase 1 of the proposed project.
- In its technical due diligence, CCC established that 1) the technical expertise of the Aecon Group was sufficient to meet the requirements of the project, 2) the Aecon Group had the capacity to undertake the project, and 3) the risk of the product or service not being available through alternate sources was been analyzed by CCC. In this case, CCC did not need to undertake a site visit to the Aecon Group as CCC had had numerous contacts and visits with supplier in the year leading up to this project.

In the course of its sub-contractor due diligence, the Government was advised that CCC had established that: (1) the Aecon Group had a management team capable of carrying on the business of the firm during the life of the CCC contract; (2) the Aecon Group had a project

team capable of managing the project; and, (3) the Aecon Group had previously managed successful export contracts in markets with similar risk profiles to that of the proposed project.

Section V. CCC/Aecon "Selection" Was Secured Incrementally and In Graduated Stages:

Although CCC was chosen by the Government as its preferred Airport P3 partner for the purpose of entering into Airport P3 commercial discussions, CCC will not be selected until the proposed Airport P3 transaction actually closes.

The "selection" process undertaken by the Government has been extremely cautious and graduated. As a matter of vital risk management, value for money and project governance, the Government decided to only engage the CCC in a highly controlled and incremental process to develop, formulate and stipulate all of the Airport P3 project's unique and creative design, construction, financial, Government contribution, regulatory, governance, remedial, risk management (including insurance), and contractual aspects through increasing stages and increments of detail and completeness. In a very practical and real sense, the "selection" process implemented by the Government is one of the longest and most prudent "due diligence" and incremental "commercial courting" exercises possible.

The Minister of Finance described the Government's highly measured and incremental Airport P3 partner selection process as follows in his Ministerial Statement to the House of Assembly on December 16th, 2015:

"Mr. Speaker, the Airport Development Agreement with the Canadian Commercial Corporation (CCC) will allow for the commencement of Phase Two of the redevelopment of the LF Wade International Airport and (will) focus on developing the detailed design and plans of the Project, and negotiating the final Project Agreements.

Honourable Members are aware that the Government proposes to redevelop the Airport by contracting with the Canadian Commercial Corporation (CCC) which is wholly owned by the Government of Canada. Based on the benefits identified and current fiscal constraints that the Government is faced with, the Government is confident that such a contract with the CCC will provide the Government with the most timely, efficient and trustworthy procurement alternative.

Mr. Speaker, to progress this proposal, I signed a non-binding MOU on November 14, 2014 and a series of Letters of Agreement with the CCC. The MOU outlined a mutual commitment to explore how the Government and CCC could redevelop the Airport and the Letters of Agreement confirmed Bermuda's and CCC's intent that the Project be developed and operated under a long term concession model, including the establishment of a special purpose concessionaire for the financing, design, construction, operation and maintenance of the Project.

Honourable Members are advised that upon the completion of those activities described in the section of the Letter of Agreement titled "Phase 1 - Preliminary Due Diligence, Project Scoping", Bermuda and CCC would determine whether to proceed with the Project and enter into an Airport Development Agreement. The purpose of this Airport Development Agreement is to, inter alia:

- a) confirm the agreement of the Parties to proceed with the Project and implement the Airport Project Concept subject to, and in accordance with, the terms of this Airport Development Agreement;

- b) agree to the process by which the Project will be developed to Financial Close and identify certain specific events that may cause the Parties to elect to terminate this Airport Development Agreement (and the basis on which termination would occur) prior to Financial Close;
- c) set out the heads of terms for the Project Agreement (the "Project Agreement Heads of Terms") that will establish the process for implementation of the Project from and after Financial Close; and
- d) constitute the "Airport Development Agreement" contemplated by the Letter Agreement...

Mr. Speaker, in closing, the Government is committed to this project and is confident that the government-to-government approach of contracting with the CCC is the appropriate model to be used for the redevelopment of the Airport. This approach will provide the Government with a timely, efficient and trustworthy procurement alternative which will provide value for money for the Government of Bermuda, and reduce risk."

As described by the Minister of Finance, the Government's selection process was structured as a developmental, incremental and graduated process over a two-year period of transaction formulations negotiation and "staged" levels of commitment. The Government's controlled and graduated "selection" process was implemented in the following increments, with each stage of those discussions, deliberation and decisions containing increasing degrees of specificity and completeness: (1) the "selection" process began with an MOU dated 10th November, 2014; (2) followed by a Letter of Agreement dated 1st June, 2014 being entered into between CCC and the Government of Bermuda; (3) followed by an Airport Development Agreement dated 24th August, 2015 being entered between CCC and the Government of Bermuda, (229 pages including all Schedules); and, (4) which will be ultimately followed by the execution and delivery of the definitive Airport P3 project agreement on (as at) the financial close of the Airport P3 transaction (expected by December 2016).

The results of the Government's deliberation and determination to select CCC, and its highly unique and beneficial offerings, as its Airport P3 partner were summarized as follows by the Minister of Finance in the delivery of his fiscal 2016-2017 budget speech to the House of Assembly:

"The facts are simple. This is a facility we need but we, Bermuda, do not have the financial capacity nor the know-how to build it. We need an overseas partner.

Of course, an overseas partner is nothing new as it relates to our airport. The American military built the airport, occupied and operated everything there, except the terminal itself, for over 50 years. When they left we had to depend on the British company Serco Plc for 20 years to operate key parts of the facility. So engaging an overseas partner to facilitate progress with respect to our vital gateway has worked for us in the past and is nothing new.

This time our overseas partner is Canada, the Government of Canada. The arrangement is built upon a government-to-government agreement, which provides solutions to the obstacles preventing us from replacing the crumbling facility. The Canadian Government is represented by Canadian Commercial Corporation (CCC). The Prime Subcontractor is Aecon, Canada's largest infrastructure development company, which has the expertise and experience in airport development we need. As concessionaire, Aecon will arrange financing from institutional investors abroad and that debt will not form part of Bermuda's national debt. The project will pay for

itself from revenues it earns during the life of the concession period. After the debt is repaid, there will be a profit sharing arrangement between Aecon and the Bermuda Government.

At a time when Bermudians have been crying out for projects to create jobs, this project fits the bill. Aecon does not intend to import an army of Canadian workers to build this terminal. It will be Bermudian subcontractors and workers that will build it, by the hundreds. This project is a major job creator for Bermudians, something no Bermudian could object to.

The project continues to gather momentum. A number of major milestones were achieved in 2015 in the airport development process. Firstly, Government was successful in negotiating a workable Letter of Entrustment from the UK Government. This settled any questions relating to the Bermuda Government's authority to enter into an agreement with CCC.

Secondly, the Airport Development Agreement was signed to move the development process into Phase 2. This was an interim agreement that ushered in the most important phase of the entire process where final specifications, detailed cost estimates, legal contracts, engineering and architectural details are developed, along with subcontracts to local contractors."

Highly Collaborative Airport P3 Partner Selection Process

As noted in the Minister of Finance's 16th December, 2015 Ministerial Statement, in order to assist the Government to formulate, develop and structure such a complex Airport P3 partner "selection" process through those incremental stages of commercial development after CCC had been identified as a potential Airport P3 partner, the Government has worked closely and collaboratively with (in addition to the extremely valuable contributions of Deloitte's report previously discussed) the following leading domestic and international advisors, all of whom have exceptional experience in the formulation, negotiation and settlement of very similar P3 transactions, including:

**Global Infrastructure
Finance**
CIBC World Markets Inc.
Toronto, Canada

Bennett Jones LLP
Toronto, Canada

Bennett Jones (Bermuda) Ltd.
Hamilton, Bermuda

LeighFisher
London, UK

KPMG LLP (Toronto)
Toronto, Canada

KPMG Advisory Ltd. (Bermuda)
Hamilton, Bermuda

HNTB Corporation
New York, U.S.A.

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Appendix 6 – Negotiation Approach

**Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda**

This appendix outlines the Government’s negotiation approach to drive value in the transaction formulation process.

Section I. Governance:

The Government established clear lines of authority and accountability at the outset. The project has been led by co-directors: the Financial Secretary and the General Manager of the Department of Airport Operations (together, the "Co-Directors"). This direction from senior civil servants ensured alignment with government priorities and responsiveness from all government stakeholders.

To manage the day-to-day flow of documentation, a Project Office was established at the offices of KPMG in Bermuda (the "Project Office"). Overseen by a senior consultant at KPMG, the Project Office became the central contact for project documentation and coordinated the circulation of drafts and the coordination of government inputs into the process.

A project board (the "Project Board") was established under the chairmanship of the Minister of Finance to provide oversight, leadership, and direction on policy and high level commercial terms of the airport redevelopment transaction. In addition to the Minister of Finance, key Government stakeholders were represented on Project Board by the Minister of Tourism, Transportation and Municipalities, the Minister of Economic Development, the Attorney General and the Minister of Public Works. Regular Project Board meetings were held to discuss project issues.

Section II. Selection of Transaction Advisory Team:

The Government sought out and retained a transaction advisory team with well-documented experience with comparable P3 structures in transportation. Each member of the advisory team could draw upon its own experience and precedent collections to ensure that the approach taken to project issues was consistent with the approaches used to solve similar issues in other transactions.

To assist the Government to formulate, develop and structure such a complex Airport P3 partner "selection" process through those incremental stages of commercial development after CCC had been identified as a potential Airport P3 partner, the Government has worked closely and collaboratively with leading domestic and international advisors with exceptional experience in the formulation, negotiation and settlement of very similar P3 transactions, including:

Financial Advisors:	
Global Infrastructure Finance CIBC World Markets Inc. Toronto, Canada	CIBC’s Infrastructure and Project Finance team has extensive experience in financial advisory for P3 projects. Combined, our team has closed over \$15 billion in P3 transactions in Canada alone and has significant experience in working with a wide range of equity sponsors and construction contractors, both domestic and foreign.
Legal Advisors:	
Bennett Jones (Bermuda) Ltd. Hamilton, Bermuda	Bennett Jones LLP is an internationally recognized Canadian law firm. Bennett Jones [Bermuda] Ltd. announced the establishment of its law practice in Bermuda in 2015. The firm has experience in complex cross-border and international transactions.

Bennett Jones LLP Toronto, Canada	Bennett Jones is a leading Canadian law firm with expertise in construction and project finance and one of Canada's leading public private partnership law firms.
Airport Operations Advisors:	
LeighFisher London, UK	LeighFisher is a management consulting firm with expertise in infrastructure advisory and consulting services. LeighFisher has over 65 years of experience in the aviation consulting sector and provides strategic facility and operational planning for their clients globally.
Technical Advisors:	
HNTB Corporation Chicago, IL, U.S.A.	HNTB is an architecture, civil engineering consulting, and construction management firm with expertise in the aviation industry, including projects at the Denver, San Francisco, and Dallas Fort Worth international airports. HNTB understands the entire life cycle of infrastructure and provides services that solve the technical, financial and operational challenges.
Process Advisors:	
KPMG (Bermuda) Hamilton, Bermuda	KPMG in Bermuda has a strong history and proven track record of work across a wide range of government and private sector projects. KPMG Bermuda has successfully managed many large projects from inception to completion. KPMG's experience includes the King Edward VII Memorial Hospital project, the first public-private partnership project in Bermuda.
KPMG (Toronto) Toronto, Canada	KPMG Canada is a leading financial and commercial advisor with global experience in airport and public-private partnership projects. KPMG Canada's experience includes airport projects in Bahamas, Cayman Islands, Barbados, Curacao, Bogota, Quito, Toronto, New York, and Hong Kong,

Each member of the advisory team has access to a portfolio of prior transactions that have been successful procured and financed. Each team member brought to the table their experience and recommendations regarding the structure and calibration of the project documents.

Section III. Transparency on Financial Terms:

The Government required a transparent financial model that was reviewed by the Government's financial advisor. The equity return available to the equity sponsors was benchmarked against comparable transactions. The cost of individual elements of the combined construction and operations services were benchmarked against comparable airport projects and the Government's own information regarding alternative construction proposals and operating history.

Aecon, through a Project Co has agreed to provide annual financial disclosures, including audited annual financial statements giving the Government ongoing visibility into the profitability of the project. If air passenger traffic grows at a rate that exceeds Project Co's projected growth the Government will become entitled to a 50% share of the excess revenue resulting.

Section IV. Established Precedents:

The Government's advisors have ensured that the structure of the transaction follows established precedents to ensure that the best pricing will be obtained in international financial markets. In each case, documentation was based on successful prior transactions with which financial markets will be familiar. Risk allocation followed existing market approaches.

Section V. Financial Controls:

Fees and charges assessable by Project Co on airport users are subject to contractual constraints to prevent Project Co from profiteering with unlimited fee increases on its captive market. Fees and charges for core activities escalate based on an annual formula based on annual cost of living increases in the United States and Bermuda. Additional increments are subject to procedures in the Project Agreement to give the Government ongoing viability and oversight.

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Appendix 7 – Value for Money

(See Value for Money Report prepared by Steer Davies Gleave)

**Ministry of Finance
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Appendix 8 – Financial Analytical Tools

Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda

This appendix provides an overview of the steps taken and tools used by the Government to drive value during the commercial negotiations with Project Co that will be assigned the construction contract in relation to the Airport Redevelopment Project. Specifically, this report discusses the development and use of financial analytics by the Government in order to achieve the most commercially favorable and financially affordable deal.

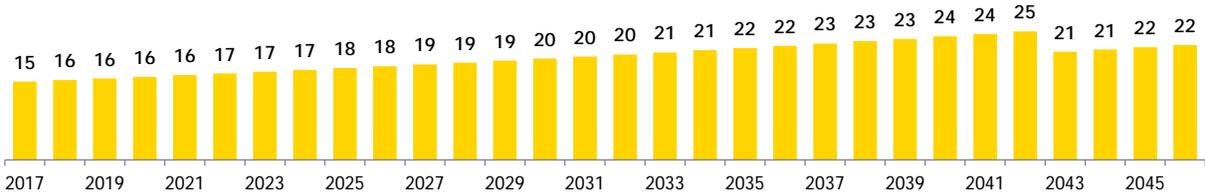
Section I. Overview:

The Ministry of Finance, in coordination with its advisors, developed two financial analytical tools in order to fully assess the financial aspects of the Project, both from a Government as well as Project Co perspective. The first financial analytical tool was designed to capture the financial contributions that the Government is providing to the Project, which would have a direct impact on the government’s fiscal position. The second financial analytical tool was designed to assess the structure and terms of the concession and evaluate the corresponding return to Project Co. Both analytical tools were frequently updated during the Project negotiations as new information was obtained and commercial terms changed. These tools enabled the Ministry of Finance and its advisors to perform detailed analytics and react in real time during negotiations with Project Co in order to achieve the best commercial terms for the Government.

Section II. Government Financial Contribution Analytical Tool:

The Ministry of Finance and its advisors developed a model (“Bermuda Cash Flow Model”) to capture all the direct and quantifiable financial contributions by the Government to the Project. The model served as verification of the annual contributions that the Government was responsible for during the Project term. Based on the output from the model, the Government was able to determine the relative impact on the Government’s overall fiscal balance and whether it was reasonable from an overall Government affordability perspective (refer to Figure I for the results from the Bermuda Cash Flow Model). When compared to the Government’s Consolidated Fiscal Balance for 2015/2016, the impact of the financial contributions is approximately 0.6% of this Consolidated Fiscal Balance. As a result of this analysis, the Ministry of Finance concluded that the Project-related financial contributions were acceptable from a Government fiscal position perspective.

Figure I. Bermuda Financial Contributions (\$ millions)



Key Assumptions – Bermuda Cash Flow Model (\$ millions)			
Annual Inflation	2%	Energy Supplement (Annual Cost 2016 dollars)	2.6
Retained Government Services (Annual Cost 2016 dollars)	8.8	BAA Op. Costs (Annual Cost 2016 dollars)	3.5

In addition to allowing the Government to evaluate affordability, the Bermuda Cash Flow Model facilitated numerous benefits for the Government during negotiations with Project Co, most importantly related to the energy supplement. The Bermuda Cash Flow Model indicated that forecasted energy costs could be significant and therefore, it would be important to find ways to decrease energy consumption of the new terminal. As a result, the Government directed Project Co to revisit the terminal design and incorporate

features to decrease energy consumption. The Government also pushed to incorporate energy conservation principles as well as financial penalties if certain energy consumption targets are not met.

Another benefit of the Bermuda Cash Flow Model was the negotiation around air traffic control fees. As part of the early Project negotiations, it was determined that the Government would be responsible for certain airport services post financial close (“Retained Government Services”); however, there was no mechanism for the Government to earn revenues to offset these costs. The Bermuda Cash Flow Model indicated that Retained Government Services costs could be significant and it would be important to determine some method for the Government to offset these costs. The Government pushed for and ultimately won the right to earn revenues from air traffic control services, thereby reducing the financial burden to the Government.

Section III. Project Co Return Analytical Tool:

As part of ADA, the Government negotiated the right to be granted access to Project Co’s financial model on a periodic basis. This unique benefit is not common in the majority of concession transactions and was only brought about due to the government-to-government nature of the Project. Specifically, in the majority of airport concession negotiations, the government authority would not receive the financial model of the counterparty. The ability for the Government to have access to this model significantly enhanced the transparency between the parties and enabled more robust negotiations as both parties were working from the same starting point. Using Project Co’s financial model as a baseline, the Ministry of Finance and its advisors were able to perform detailed sensitivity analyses and in-depth reviews of Project Co’s key assumptions.

In addition to Project Co’s financial model, the Government also had access to the detailed construction budget developed by Project Co. Construction firms are very sensitive to sharing their detailed cost estimates, especially their profit margins and contingencies. Similar to the financial model, obtaining the detailed construction budget of the counterparty is not a common feature of airport concessions and is a benefit brought about by the government-to-government nature of the transaction. The Government’s technical advisors appointed an independent third party to apply due diligence to the construction cost build-up and ensure that it contained industry-accepted assumptions for labor costs, material costs, and contingencies.

In-Depth Model Review

The Government and its advisors reviewed each of the underlying assumptions in Project Co’s financial model for reasonableness and directed Project Co to amend any estimates as required where it was determined that their assumptions were inappropriate.

Key reviews performed by the Government’s advisors included:

1. benchmarking of revenues and operating costs to airports globally
 2. line-by-line review of operating expense assumptions
 3. line-by-line review of the construction budget and comparison to industry norms for similar construction projects
 4. independent review of the long-term traffic forecast
 5. benchmarking of pro forma equity return against comparable airport concession projects globally.
- Based on the work of the Government’s advisors, the Ministry of Finance is confident that Project Co’s financial model contains appropriate and well-supported assumptions and that the financial model paints a reasonable picture of the airport’s operations going forward based on information known today.

Model Completeness

The Ministry of Finance and Department of Airport Operations (DAO) also reviewed the model for completeness. The original model put forward by Project Co was missing several revenue line items, which understated the equity return to Project Co. Specifically, Project Co did not originally include certain revenue line items such as fuel concession revenue and general aviation landing fees. Subsequent model revisions were appropriately updated.

Project Co Negotiations

The Ministry of Finance used the financial model frequently to support the Government's position during negotiations with Project Co. Specifically, Project Co would frequently make statements that commercial requests by the Government were uneconomical and could not be supported by the Project. In order to refute Project Co's assertions, the Government would perform detailed sensitivity analysis to determine the incremental impact on Project cash flows and net impact to equity returns. There are several key commercial terms worth highlighting where this method was used to deliver tangible benefits to the Government during negotiations with Project Co.

- *Concession Term:* Project Co originally pushed for a concession term consistent with the Canadian P3 model whereby the concession term is the construction period plus 30 years (total estimated period of ~34 years). The Government and its advisors were only comfortable providing a total concession term of 30 years; however, Project Co stated that this would have a material impact to the Project. Ultimately, the Government was able to demonstrate that the net impact to equity returns under a 30-year vs. 34-year concession term was immaterial.
- *Upside Revenue Sharing:* Per the ADA, both parties agreed that the Government would share in the revenues of the Project if actual results far exceeded original expectations. The two key items that were not settled during the negotiation of the ADA were i) the upside sharing percentage and ii) at what revenue level upside sharing would commence. Project Co originally offered a Government sharing percentage of 30% of upside revenues at a regulated revenue line well above their base forecast. The Government analyzed equity returns under the high case traffic scenario using this proposal and determined that equity returns under this scenario were far too high. The Government rejected Project Co's offer and secured a 50% upside sharing percentage, taking effect as soon as their regulated revenue forecast was achieved. This suppresses Project Co's upside return opportunity, beyond their target equity returns, and positions the Government well for earning surplus revenues.
- *Minimum Revenue Guarantee ("MRG"):* The original financial model put forward by Project Co assumed that due to a history of declining air traffic in Bermuda and general credit attributes of the Project, the Project would require a revenue guarantee in order to achieve a debt rated low investment grade by credit rating agencies. As a result, the total debt that could be procured would be relatively limited in quantum and duration resulting in a substantial funding shortfall, which the Government would need to bridge in some way to make the project financially viable. As any direct contribution by the Government to construction costs was not permitted, it was necessary to find a means to improve the Project's credit characteristics and allow more project debt to be raised to make the Project financially feasible. Worse, the structure of the proposed guarantee not only benefited senior lenders, but also provided Project Co with a guaranteed minimum equity return.
- The Government and its advisors ultimately were able to craft a MRG mechanism that gave lenders comfort without providing a minimum return guarantee to Project Co, and thereby bolstered the credit

profile of the Project substantially. Based on initial discussions with credit rating agencies, the MRG will enable the Project to achieve a solid investment grade rating, increasing the debt quantum from \$159 million with a 15-year term to \$275 million with a 25-year term. Furthermore, with the increased term and quantum of the debt, the Government was able to eliminate other sources of Project-related support such as the AIF Reserve top-up.

- *Equity Return:* The original financial model put forward by Project Co contained an equity return of 18.4% over the life of the concession. The Government’s financial advisors determined that the maximum equity return for a project of this risk profile was between 13% and 17% based on review of comparable airport concession globally. The Government objected vehemently to the proposed equity return put forward by Project Co. It was agreed between the parties after intense negotiation to target an equity return between 15% and 16%. This resulted in a decrease of many millions of dollars in profits to be received by Project Co over the life of the concession.
- *Energy Supplement:* Based on early negotiations with Project Co, it was determined that the energy supplement, needed to ensure financial viability of the project and intended to be offset by a proposed photovoltaic power project on airport lands, would be in place for the entire 30-year concession term. Due to the materiality of this financial obligation and volatility of energy prices in the Government, it was important to find additional ways to mitigate the liability associated with the energy supplement. The Government performed sensitivity analysis on the Project Co financial model to determine the impact on equity return if the energy supplement was shortened to 25-26 years (term of the Project debt) rather than 30 years. Based on the analysis, shortening the term of the energy supplement to 25-26 years would reduce equity return over the life of the concession by a mere ~0.09% while saving the Government millions of dollars. As a result, Project Co agreed to shorten the energy supplement term to 26 years versus 30 years.

Model Outputs

Key outputs from the Project Co financial model are outlined below:

Figure II. Project Funds Sources & Uses (\$ millions)

Project Sources & Uses During Construction (\$ millions)			
Sources:		Uses:	
Project Debt	\$275	Airport Capital Costs	\$302*
AIF Reserve	\$6	Pre-funding of Reserve Accounts	\$31
Equity	\$65	Maintenance Capex Account Funding	\$10
Cash Flow from Operations	\$84	Debt Service Account Funding	\$62
		Other Development Costs	\$25
Total Sources	\$430	Total Uses	\$430

*This figure represents capital expenditures of \$256m including inflation, contingency costs, builder’s insurance and demolition costs.

Figure III. Project Key Assumptions

Select Key Assumptions – Project Co Financial Model			
Annual Inflation	2%	Project Debt Term (years)	25
Passenger Traffic Growth (2016-2046) (CAGR)	0.7%	Project Debt Interest Rate	7.0%
Airport Infrastructure Charge (per departing PAX)	~\$30	Project Debt Credit Rating	A-

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Appendix 9 – Budgetary Impact

**Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda**

This appendix provides an overview of the impact of the Project on the Government’s budget. Specifically, this report assesses the budgetary impact of the Project against the status quo scenario.

Section I. Cash Flow Summary:

The Ministry of Finance has developed a cash flow summary under both the status quo scenario as well as the transaction scenario being considered.

Status Quo Scenario: Maintain Existing Terminal (“As Is” Baseline)

The status quo scenario involves the existing terminal being kept in operation with minimal necessary maintenance capital investment. It is important to recognize that this scenario is not viable for numerous operational risk reasons. For example, the terminal remains highly susceptible to storm surge damage and could be damaged beyond repair by a major hurricane. In addition, it should be noted that many of the existing terminal related structures and systems are close to or beyond the end of their intended service life. As a result, ongoing maintenance costs will escalate beyond the estimates provided here, and would merely delay the inevitable outcome where the terminal will need to be replaced. As the airport is a vital link for Bermuda to the outside world, the risks associated with continuing to operate the existing terminal are exceedingly large and cannot be accurately quantified. It is for this reason that the only practical solution for the Government is to replace the terminal at this time of low interest rates. Nevertheless, this scenario is used as a point of reference.

When considering a long-term maintenance scenario, there are two important categories of costs that need to be included. The first are up-front costs required to make urgent near-term repairs to the existing terminal as well as some improvements to the facility that are necessary to continue operations. These were estimated by the Government’s technical advisor to be \$62.3 million in repairs and \$104.8 million in improvements in a 2013 report. In addition ongoing maintenance costs need to be also included.

The relevant cash flow inputs are provided in the following table:

Cash Flow Item	Description
Airport Operating Cash Flows (+)	- Represents net cash flows generated by the airport that would be retained by the Government. Cash flows have been forecasted under the no revenue growth scenario. Rationale for no growth scenario is that there would be no change in the commercial, operational, or management capabilities of the airport under this option and terminal would be in poor physical condition, which would hinder growth.
Borrowing Costs (-)	- The Government would need to borrow ~\$184 million to finance urgent near term maintenance and improvements in the first two years. We assume that this would be done through general government borrowing with no impact on the Government’s sovereign rating. Debt repayment was assumed to occur over a 30-year period in order to ensure comparability to the other scenarios. These are conservative assumptions and the costs could be substantially higher depending on the scope of the work required or increases in the Government’s cost of borrowing.
Incremental Hotel Tax Revenue (-)	- Under this option, Bermuda would likely have lower passenger volumes and hotel accommodation tax revenue to the government would decrease
Maintenance Costs (-)	- The Government would be required to pay for maintenance costs for the airport under this option. We estimate this to be \$5.0 million per year based on historical capital expenditures, although the actual value would likely be much higher, and escalated at 5% per the Government’s technical advisor analysis.

Based on these assumptions the following net present value analysis for the status quo scenario shows that the aggregate costs over a 30-year period would exceed (\$551) million dollars (undiscounted cash flows) with a net present value of (\$283) million dollars (refer to Figure I).

Figure I. Status Quo Scenario – Maintain Existing Terminal Net Present Value Analysis

Illustrative Net Present Value Analysis – Maintain Existing Terminal (\$ millions)										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2046
Cash Inflows										
Airport Operating Cash Flows	4.0	4.1	4.2	4.2	4.3	4.4	4.5	4.6	4.7	7.1
Net Cash Inflows	4.0	4.1	4.2	4.2	4.3	4.4	4.5	4.6	4.7	7.1
Cash Outflows										
Project Borrowing Costs	(14.0)	(13.7)	(13.4)	(13.2)	(12.9)	(12.6)	(12.4)	(12.1)	(11.8)	(6.2)
Incr. Hotel Accommodation Tax	(0.6)	(0.4)	(0.4)	(0.4)	(0.4)	(0.5)	(0.5)	(0.6)	(0.7)	(4.5)
Maintenance Capital Costs	(5.3)	(5.5)	(5.8)	(6.1)	(6.4)	(6.7)	(7.0)	(7.4)	(7.8)	(21.6)
Net Cash Outflows	(19.9)	(19.6)	(19.6)	(19.7)	(19.7)	(19.8)	(19.9)	(20.1)	(20.2)	(32.3)
Net Cash Flows	(15.9)	(15.6)	(15.4)	(15.4)	(15.4)	(15.4)	(15.5)	(15.5)	(15.6)	(25.3)
Total Undiscounted Cash Flows	(551)									
Net Present Value	(283)									

Current Transaction Scenario

From a cash flow perspective, there are several key elements that must be included in respect to the current transaction scenario:

Cash Flow Item	Description
Incremental Hotel Tax Revenue (+)	- With an experienced airport operator, the Government would earn additional tax revenues from tourists compared to the scenario where the Government continued to operate the airport. Specifically, passenger traffic would be higher with a private entity operating the airport which will lead to higher accommodation tax revenues compared to the status quo
Retained Government Services (-)	- The Government would be required to pay for certain airport operating expenses (i.e. ATC, meteorological, ground electronics, ARFF) under this option. This has been estimated at \$8.8 million per year escalated by inflation
BAA Annual Costs (-)	- The Government would be required to set up at BAA to regulate the operations of Project Co. The cost of the BAA has been estimated at \$3.5 million per year escalated by inflation
Tax Concessions (-)	- The Government has granted several tax concessions to Project Co. The value of these concessions has been estimated at \$50 million and have been presented at the beginning of the Project
Energy Subsidy (-)	- The Government would be required to pay for annual energy costs for the airport under this option. This has been estimated at \$2.6 million per year escalated by inflation

Based on these inputs, the following illustrative net present value analysis has been prepared. The aggregate cash outflows to the Government associated with the current transaction option would be (\$567) million dollars (undiscounted cash flows) and the net present value is (\$317) million dollars (refer to Figure II).

Figure II. Transaction Scenario

Illustrative Net Present Value Analysis – Current Transaction Scenario (\$ millions)										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2046
Cash Inflows										
Incr. Hotel Tax Revenue	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Net Cash Inflows	0.8	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	4.1
Cash Outflows										
Retained Government Services	(9.0)	(9.2)	(9.3)	(9.5)	(9.7)	(9.9)	(10.1)	(10.3)	(10.5)	(15.9)
BAA Operating Costs	(3.6)	(3.6)	(3.7)	(3.8)	(3.9)	(3.9)	(4.0)	(4.1)	(4.2)	(6.3)
Tax Concessions	(50.0)	-	-	-	-	-	-	-	-	-
Energy Subsidy	(2.7)	(2.7)	(2.8)	(2.8)	(2.9)	(2.9)	(3.0)	(3.0)	(3.1)	-
Net Cash Outflows	(65.2)	(15.5)	(15.8)	(16.1)	(16.5)	(16.8)	(17.1)	(17.5)	(17.8)	(22.3)
Net Cash Flows	(64.4)	(14.3)	(14.4)	(14.6)	(14.7)	(14.8)	(14.9)	(15.1)	(15.2)	(18.2)
Total Undiscounted Cash Flows	(567)									
Net Present Value	(317)									

Although the net present value and aggregate undiscounted cash flows are lower under the current transaction scenario, it is important to stress that the status quo figures dramatically underestimate the true cost to the Government. Specifically, the status quo cash flows do not include any replacement capital and do not account for lost revenues or the potential broader negative economic impact on the Government as a result of the airport being damaged and non-operational. Also, due to the age of the existing terminal, at some point the Government would have no choice but to construct a new terminal, possibly at a much less favourable point in the economic cycle and at a much higher cost. As a result, the Ministry of Finance is confident that, when all factors are considered, the current transaction scenario would lead to a stronger and more favourable result to the Government from a cash flow perspective.

Section II. Impact on the Government's Tax Base:

The Project will have a minimal impact on the Government's tax base as airport-generated revenues account for a small portion of the Government's revenues. Based on review of the Government's historical revenues since 2009 as well as projected revenues to 2018, the Project would result in a maximum 2.6% to 3.0% decrease in Government revenues ignoring any ancillary tax benefits of the Project (refer to Figure III). Over the long-term, the Ministry of Finance would expect this percentage to decrease as Bermuda's economy is anticipated to exhibit growth, which would result in higher overall revenues; therefore, the relative portion of airport-related revenues would be less.

Figure III: Historical and Projected Government Revenues

Government Revenue Budget (\$ millions)									
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17F
Custom Duties	224	219	196	181	170	175	171	194	209
Payroll Tax	357	349	423	345	328	331	334	353	390
Int'l Co Taxes	65	59	62	61	62	62	63	61	66
Local Company Fees	3	5	3	3	3	3	3	3	3
Foreign Currency Tax	14	14	25	23	22	21	20	20	21
Land Tax	46	49	49	52	56	60	61	63	63
Hotel Occupancy Tax	11	7	7	11	10	9	9	11	11
Vehicle License	27	27	27	27	26	27	28	27	28
Passenger Tax	30	29	32	35	35	34	33	40	43
Stamp Duty	46	32	35	25	19	21	24	24	24
All Other Receipts	130	127	132	152	137	140	134	140	138
Total Revenue	953	917	991	914	867	884	880	935	997
<i>Year-on-Year Increase</i>	-	2.6%	-3.7%	8.0%	-7.7%	-5.2%	2.0%	-0.4%	6.2%

As noted above, the analysis does not capture ancillary tax benefits associated with the Project. Specifically the analysis does not account for potential increases to the Government’s tax base driven by increased tourism growth. With an experienced airport operator, the Government would earn additional tax revenues from tourists compared to the status quo scenario where the Government continued to operate the airport. Specifically, passenger traffic should be somewhat higher with a private entity operating the airport, which will lead to higher hotel occupancy tax revenues compared to the status quo. Furthermore, increased tourism will likely lead to an increase employment in the tourism sector, which will increase payroll taxes for the Government. The net impact of these two items is difficult to quantify; however, it is safe to say that these factors would lead to a decrease in the net impact to the Government’s tax base relating to the Project.

Overall, looking at all the factors, the associated impact of the Project on the Government’s tax base is estimated to be relatively immaterial.

Section III. Ancillary Impacts Associated with the Project:

In addition to the direct budgetary impact to the Government, there will be several ancillary benefits created by the Project. As noted above, hotel occupancy tax revenue and payroll tax revenue will be higher due to increased tourism; however, there will be certain “knock-on” effects to the overall Bermuda economy. Several of the key “knock-on” effects are as follows.

Employment:

The Project will lead to both increased employment at the airport (approximately 30 new local positions will be created, almost doubling the current DAO staff) as well as in the local construction sector. The Project will generate significant local construction jobs for the first four years of the concession while the airport is being built (estimate of a minimum of 88 construction jobs per year will be created during the construction period). In addition, there will be a long-term benefit to the construction sector of enhanced knowledge and skills that will be gained through apprenticeships and job training programs offered by Aecon during the construction period. All in all, the Project will lead to increased employment in Bermuda and result in a lowering of the unemployment rate. This will reduce the pressure on the Government’s social assistance programs as more individuals are employed and will not need to rely on assistance from the government.

Project Co will commit to ensuring that the development of the new terminal and operations of the airport will give priority to employing local Bermuda labour and businesses. Key aspects of the Agreement that encourage local employment are:

- All Department of Airport Operations employees have received Project Co employment offers. Project Co is obligated to provide employment offers, which on the whole, are no less favourable than current employment terms. If employees fail to accept Project Co or BAA employment offers then the Government will retain these employees and the associated employment cost.
- Airport operations employment across Project Co and the BAA is expected to increase 50% over current staffing levels at the Department of Airport Operations.
- Aecon Construction is required to maximize the use of Bermuda-based companies and labour in the construction of the new airport terminal, with approximately 60% of the 400 plus construction jobs expected to be filled by Bermudian labour.
- Aecon will invest in an internship program to provide six-month internships for seven Bermudian construction profession (e.g., engineers and architects) graduates with the opportunity for employment during the Construction Phase following successful completion of the internship.

Debt:

One key benefit of the Project is that the funds used to develop the new airport will be raised by Project Co and have no recourse to the Government. As a result, there is no resulting impact on the Government's sovereign debt borrowing costs and interest expense will be consistent with today. Under the status quo scenario, if significant replacement capital expenditures were required, either due to weather events (in excess of insurance cover) or due to simply the need to replace legacy buildings, the Government would potentially be required to raise debt to finance the capital expenditures. The additional debt could result in an increase in sovereign borrowing costs to the Government and increase the amount of interest that the Government must pay on its debt.

Upside Sharing:

The current transaction structure includes an upside sharing revenue mechanism which will enable the Government to participate in cash flows from the Project in the event cash flows generated by the airport are greater than originally forecasted. As a result, in the event the airport is performing well, the Government's overall revenues will be higher.

Reduced Airport Interruption Economic Impact:

The current transaction structure limits the potential fallout that could occur under the status quo scenario whereby the airport is damaged and the airport is non-operational for a period of time. Under the status quo scenario, the airport could be shut down from damage (e.g. storm surge) and this would have a significant impact on the Government's economy being the only gateway into the island. A shutdown would result in lower tax revenues (payroll taxes due to lower employment, lower hotel accommodation tax revenue as a result of lower tourism activity, etc.).

L.F. Wade Airport Redevelopment Project

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Appendix 10 – Accounting and Balance Sheet Impact

**Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda**

This appendix provides an overview of the accounting, debt, and credit rating impacts of the Project the Government.

Section I. Accounting Impact

The Government has engaged KPMG to provide professional advice with respect to the accounting and financial reporting implications to the Government of the proposed airport P3 transaction. KPMG's work is ongoing. On a preliminary basis and subject to change, the following is a summary of KPMG's findings:

There are no specific sections within the Canadian Public Sector Accounting Standards (PSAS), which address measurement, recognition and classification issues with respect to P3 arrangements. As a result, International Public Sector Accounting Standards (IPSAS) 32, Service Concession Arrangements is applied to assess this transaction.

Asset Recognition

IPSAS 32 establishes two criteria to determine whether an asset should be recognized by the Government:

- The grantor controls or regulates what services the operator must provide with the asset, to whom it must provide them, and at what price; and
- The grantor controls—through ownership, beneficial entitlement or otherwise—any significant residual interest in the asset at the end of the term of the arrangement.

As both criteria are assessed to be met for this arrangement, the service concession asset (comprising the newly constructed airport facility) would be recognized by the Government of Bermuda and recorded on its financial statements as an asset as the facility is constructed by Project Co.

Liability Classification

As the Government will recognize a service concession asset with respect to the new airport facility and terminal on its financial statements as it is constructed by Project Co, the Government will be required to concurrently recognize a liability representing the unearned revenue assigned to Project Co throughout the 30 year term. This liability represents the Government's obligation to Project Co, were the Project Agreement to be terminated before the end of the 30-year term, for revenues assigned but not yet realized to offset facility construction and operating costs. This obligation is only settled by the Government as the term of the Project Agreement lapses. The Government would recognize revenue and reduce the liability in a rational and systematic manner over the 30-year agreement term linked to the economic substance of the asset.

Profit and Loss

Throughout the term of the agreement, the Government may recognize various sources of revenue. The first stream is the unearned revenue throughout the term of the Project Agreement. The second stream relates to the upside revenue sharing with Project Co. The third stream relates to the leased lands provided to Project Co over the 30 year term, albeit immaterial.

In terms of expenses, the Government is required to incur costs related to the retained services, namely the ATC Services, Meteorological Services, Airport Fire Rescue Services and Ground Electronics Maintenance Services. These expenses will be recognized as costs are incurred.

Disclosure Requirements

The Government has provided a Minimum Revenue Guarantee to Project Co if regulated revenues fall below a certain threshold during the term of the agreement. As the occurrence of future event is not yet determinable, the Government should disclose information regarding the existence of the Minimum Revenue Guarantee in the notes of the financial statements, and monitor the likelihood of a required contribution during the annual reporting exercise.

Section II. Balance Sheet and Credit Impact

Sovereign Debt Impact:

The proposed transaction structure involves the creation of a special purpose company, Project Co, that will raise the debt and equity capital required to finance the development of the Project and receive all cash flows generated by the airport during the concession term. SPVs are widely used and accepted legal structures for infrastructure concession transactions globally. For reference, an SPC is a separate legal entity formed for a single, well-defined and narrow purpose, which in this case is the redevelopment and operations of the L.F. Wade International Airport for the 30-year concession term.

As noted, the SPC will raise the debt financing required for the Project, which is estimated to be approximately \$275 million. The SPC is effectively “ring-fenced” and debt holders will only have recourse to the cash flows generated by the SPC, or more specifically the net cash flows generated by the airport. In the event the net cash flows generated by the airport are insufficient to fund principal and interest payments, debt holders will have no other means to seek repayment of amounts owing. This is an important distinction, as Bermuda does not become liable for the \$275 million project debt if airport net cash flows are insufficient to pay principal and interest. As Bermuda is not liable for the debt incurred by the SPV, Bermuda would not be required to record the debt on its balance sheet and there would be no impact on its sovereign debt profile.

An important related topic that needs to be addressed is the MRG. The MRG is designed to provide debt holders with some limited protection in the specific event that projected air traffic related revenues do not materialize as forecasted in the current financial model. If the MRG were triggered, Bermuda would be required to set aside funds, up to a capped amount, into a trust account, which could subsequently be accessed by debt holders in the event that airport net cash flows are insufficient to make interest and principal payments in a later period. It is critical to note that the MRG is not an outright guarantee of the project’s debt by Bermuda and only provides limited downside protection to debt holders specifically related to air traffic levels. As such, the MRG does not result in Bermuda becoming liable for the repayment of any of the project’s debt. Bermuda would therefore not be required to recognize the project debt as a liability and there would be no impact on Bermuda’s sovereign credit profile. From an accounting perspective, the MRG would be treated as a contingent liability by Bermuda; however, for a contingent liability to be recorded, it must be both highly probable of occurring and be reasonably estimated. As the MRG will be set well below Bermuda’s historical traffic levels, making it a low probability event, and since the related contingent liability will fluctuate from period to period based on air traffic forecasts, the liability could not be reasonably estimated. Therefore, this liability would not be recorded on Bermuda’s balance sheet either.

Credit Rating Impact:

Rating agencies look at several factors when assessing the credit rating of a sovereign nation. For instance, Standard & Poor’s (“S&P”), which currently has a credit rating for Bermuda of A+ looks at six factors: 1. institutional assessment, 2. economic assessment, 3. external assessment, 4. fiscal assessment: flexibility

and performance, 5. fiscal assessment: debt burden and 6. monetary assessment. In determining whether the Project has any impact on Bermuda's credit rating, the Ministry has reviewed each of the S&P factors and whether the Project has any resulting impact on these factors and the net impact, if any, on Bermuda's overall sovereign credit rating.

1. Institutional Assessment (No Impact)

This factor reviews the stability of the sovereign nation from a policymaking and political institution standpoint. The Project will not result in any change to the political framework of Bermuda and as a result, there is no impact on this factor.

2. Economic Assessment (Potential Upward Impact)

This factor reviews a country's income levels, growth prospects as well as economic diversity and volatility. The Project will actually increase the growth prospects of Bermuda by having a modernized airport terminal facility and improved airport management personnel with a shared goal of growing Bermuda tourism. The impact on growth is difficult to estimate with certainty; however, the Project will likely raise the economic assessment factor for Bermuda.

3. External Assessment (No Impact)

This factor reviews a country's ability to obtain funds from abroad necessary to meet public and private sector obligations of non-residents. The Project will not result in any change to the Bermuda's ability to obtain funds from abroad and as a result, there is no impact on this factor

4. Fiscal Assessment: Flexibility and Performance (Neutral to Slightly Negative)

This factor reviews i) change in general government debt stock during the year expressed as a percentage of GDP in that year and ii) governments room to maneuver to mitigate the effect of economic downturns or other shocks and to restore fiscal balance. The Project would likely have a neutral to slightly negative impact on this factor given the possibility low traffic levels requiring payments under the MRG mechanism could be accompanied by other unfavourable economic results. This is mainly driven by the importance of tourism activity to Bermuda's economy – a decline in tourism would impact both passenger traffic levels and Bermuda's overall economic performance. In such circumstances, Bermuda's obligation to make payments under the MRG and reduced general government revenues would together reduce the government's available liquidity to provide support to the broader economy. As noted earlier, the likelihood of this occurring is remote as passenger levels would need to decrease below historical levels seen in Bermuda and because of the relative diversity of Bermuda's economy.

5. Fiscal Assessment: Debt Burden (Potential Upward Impact)

This factor reviews a country's debt burden and looks at such factors as debt to GDP, interest cost of debt relative to government revenue, funding access and debt structure. As noted above, the Project will not result in any incremental debt to Bermuda as the project debt is procured through a SPV and is non-recourse. However, GDP will increase in the interim due to increased employment on the island from the construction of the new airport terminal, which will result in lower debt to GDP. As a result, this factor may increase from its current level.

6. Monetary Assessment (No Impact)

This factor reflects the extent to which a country's monetary authority can fulfill its mandate while supporting sustainable economic growth and attenuating major economic or financial shocks. The Project will not result in any change to the monetary framework of Bermuda and as a result, there is no impact on this factor.

Overall Impact

Based on review of each of the standalone factors, on-balance the Project would have a neutral to net positive impact on Bermuda's credit rating. This is based on additional growth that will be spurred by the Project from increased tourism and increased GDP as a result of the construction of the new airport terminal.

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Appendix 11 – Program and Risk Management

**Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda**

This appendix provides an overview of the program and risk management strategies employed by the Government to ensure successful completion of the Project. Specifically, the report will discuss the Government's use of advisors in the transaction phase to develop the Project, approach to transition of operations, and approach to risk management during the term of the project agreement.

Section I. Transaction Phase:

Since the inception of the Project, the Government has solicited the advice and assistance of various external professional services firms to ensure the successful completion of the Project. These advisors are collectively referred to as the Government Advisory Team (“GAT”), and the group is co-chaired by the Government’s Financial Secretary and the General Manager of the DAO. The list of external advisors and their roles are described below.

Bennett Jones – Legal Advisor

Bennett Jones is the lead legal advisor for the Project. The firm brings deep experience in project finance and contract negotiations to support the negotiation of the ADA, and the Project Agreement and its respective schedules. Bennett Jones works closely with the Government to work through any legal matters that arise throughout the duration of the Project, advising the Government on the best course of action.

CIBC – Financial Advisor

CIBC is the lead financial advisor for the Project. As the financial advisor, CIBC provides strategic support surrounding deal structure and deal terms. CIBC brings deep experience in infrastructure financing, and is critical in negotiating financial and commercial terms for the Project Agreement. In addition to deal negotiation, CIBC also plays a role in assisting the Government in assessing the impact of the transaction on the Government’s cash flows and credit ratings.

Leigh Fisher – Technical Advisor (Operations)

Leigh Fisher, a leader in aviation consulting, provides technical advice to the Government on airport operations and aviation-specific issues. Leigh Fisher advisor was closely consulted concerning aviation forecasts and master planning, and throughout negotiation of the Project Agreement.

HNTB – Technical Advisor (Design and Engineering)

HNTB provides technical advice to the Government on the costs and engineering related aspects of the Project. HNTB’s advice includes but is not limited to reviewing capital costs of the Project, providing innovative solutions to energy reduction, providing expert input on building specifications in the ADA and the Project Agreement.

KPMG – Project Management

The Government engaged KPMG to be the project managers of the Project. KPMG is responsible for the day-to-day management of the project through the transaction process, leading GAT meetings, and ensuring that critical problems that arises throughout deal negotiations are addressed and resolved. KPMG also liaises with the project management team at Aecon on behalf of the Government’s advisors.

Various project management and reporting mechanisms are in place to support the successful completion of the project. Such mechanisms include:

- Government Advisory Team meetings
- Project Management Office meetings
- Project Board memorandums
- Project Board meetings
- Cabinet meetings

These reporting and oversight mechanisms are in place to ensure that information can be collected and reported in a timely manner. In addition to reporting, these mechanisms allow timely and informed decision making which is vital in keeping the Project on time and on budget.

Government Advisory Team meetings

The Government Advisory Team, or GAT, is chaired by the Financial Secretary of the Government of Bermuda and the General Manager of the Department of Airport Operations, and includes government representation from the DAO, Ministry of Finance, and other departments as needed. The GAT meets generally once a week, where Government team members and advisors report on their progress on various responsibilities during that week. These meetings are led by KPMG in their role as the project managers, and all issues are discussed and documented.

Project Management Office meetings

On a bi-weekly basis, KPMG, in its capacity as the Project's project management office, communicates with Aecon's project management office to discuss progress on various matters. Any outstanding issues are raised, and both parties communicate updates from the meetings back to each respective team. Responsibilities are then assigned to address any issues.

Project Board meetings

On a weekly basis, the Minister of Finance, Minister of Tourism Transportation and Municipalities, Minister of Economic Development, Minister of Public Works, and Attorney General meet to discuss matters pertaining to the Project. These Cabinet ministers collectively constitute the "Project Board". The Project Board was given direction by Cabinet to have authority to oversee and make decisions related to the Project. At Project Board meetings, the Ministers are updated on the progress of the Project, and any issues or matters that require their attention or decision are raised. All issues raised are accompanied by a memorandum to Project Board that provides details of the issue, and is circulated prior to the meeting. Project Board meetings have been an effective way to garner informed and timely decisions from the Ministers.

Cabinet meetings

At various milestones in the Project, attention and decisions are required from Cabinet. Such milestones include the approval of the, MOU, LOA, ADA and the Project Agreement. These meetings are prefaced by a memorandum to Cabinet that provides the requisite background on the matter at hand. As several members of Cabinet attend the weekly Project Board meetings, multiple Cabinet Ministers already have a deep understanding of the Project.

Section II. Operations Transition:

Over the concession term, airport operations will be overseen by the BAA, which will effectively take the place of the existing DAO as the Government's representative relating to the airport. The BAA will supervise Project Co's performance of its obligations as specified in Schedule 4 Airport Operations, Obligations, Scope and Specifications of the Agreement. The vast majority of existing DAO staff will be transitioning to Project Co, which will help ensure managerial continuity and a crucial knowledge transfer regarding airport operations through the operations transition period. The legislation surrounding the development of BAA is currently being drafted by a combination of outside legal counsel and the Attorney General's Chambers. The BAA will also be responsible for administering the Agreement, for the provision of the Retained Government Services (such as air traffic control), and for additional revenue generating opportunities.

Section III. Risk Management:

The government has a robust risk management strategy to identify, assess, and control risks that emerge during the course of development and implementation of the Project. This strategy includes the following tools, which are described below.

- The use of advisors
- Project Management Office
- Processes for review
- Stipulated off-ramps
- Risk allocation in project agreement

Use of advisors

The success of the Project relies heavily on the use of external advisors to ensure that the project is moving in the right direction. All issues are raised and discussed at Government Advisory Team meetings to ensure that legal, financial, technical, and project management risks are considered before a decision is made or an action is taken. All internal, third party, and counterparty documents are reviewed by the relevant experts within GAT to identify risks and issues. For example, capital project costs developed by the counter-party were reviewed by an independent third party contracted by HNTB to ensure that the costs are reasonable, and that no over or underestimation was evident.

Project Management Office

Effective project management is instrumental in identifying and monitoring project risks. Through a timely reporting process, risks can be quickly identified to increase the likelihood of success of mitigation. The Government has engaged KPMG to act as the Project Office and to perform this function. The Project Office together with the Government Advisory Team has been very effective in raising and addressing issues efficiently and effectively.

Processes of review

In addition to Government Advisory Team review, all actions and decisions are subject to input and review from the Co-Directors of the Project, the Financial Secretary and the General Manager of the Airport. Further, major project decisions are subject to the Project Board Ministers for input and review. The layers of required reviews in place significantly reduce the risk that major considerations were overseen that may adversely affect the Project or its outcomes.

Stipulated off-ramps

The Project is structured so that there are stipulated off-ramps that minimize the financial impact to the Government of Bermuda in the event that there is a need to terminate the Project. These off-ramps significantly reduce the uncertainty surrounding these events and as such reduce the overall risk of the Project. Bermuda's liability on termination is limited to the substantiated Development Costs not exceeding the scheduled Development Costs without any markup. A summary of the nine off-ramp events in the ADA, includes:

1. There occurs a significant and material deterioration in the Project economics
2. Financial markets change significantly making any project financing unachievable
3. An operations Person has not been procured in accordance with the agreement
4. Geotechnical or environmental site investigations disclose material unknown conditions resulting in an affordability gap
5. Fail to agree on operating functional specifications, key performance indicators, reporting, monitoring and remedies for failures
6. The Parties fail to agree on the material assumptions used to develop the Financial Model

7. The Parties fail to definitively agree on the Core Project Documents
8. Required arrangements have not been made
9. An investment grade credit rating has not been achieved

Risk Allocation in Project Agreement

The Project Agreement is a contract that includes the construction and operation of the L.F. Wade International Airport over the 30-year concession term. The strategy to manage the Government’s exposure to project risk includes the allocation of risk to Project Co and having the systems and oversight to manage these risks.

The use of a P3 structure in itself is a risk mitigation/management mechanism. The deal structure allows the Government to transfer a significant portion of cost overruns and schedule overrun risk to the private sector. This risk transfer contributes to an overarching reduction of project risk.

A principle used in the drafting of the Project Agreement is to assign project risks to the party best able to manage the risk. The table below summarizes at a high level the risk allocation between the Government and CCC/Aecon/Project Co over the construction period and the operating period across key risk categories.

Risk	Project Co	Government	Shared
Financing	◆		
Design	◆		
Construction cost overrun	◆		
Construction delay	◆		
Airport operations	◆		
Commercial services	◆		
Meeting service standards	◆		
Facility maintenance	◆		
Aircraft rescue and firefighting		◆	
Airport traffic volume			◆
Pre-existing environmental contamination		◆	
Environment contamination from airport operations	◆		
Supervening events			◆
Change in aerodrome standards and airport regulatory changes			◆
Energy consumption		◆	

The BAA will act as the Government’s contract manager for the Agreement, including ongoing monitoring of Project Co’s performance. Some of the most important tools the BAA will use to monitor Project Co’s performance are the mandatory reporting requirements of the Agreement. Schedule 14 of the Project Agreement details the records and reporting requirements of Project Co. Additional information on BAA’s monitoring role and Project Co’s reporting requirements can be found in Appendix 13 Regulatory Framework.

L.F. Wade Airport Redevelopment Project

Overall Business Case - Entrustment Report

Appendix 12 – Contingency Plan

**Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda**

This appendix provides a summary of the Government's contingency plans for failure of the Project at any stage. For this purpose, the Project life has been subdivided into four segments as follows:

1. Before Settling the Project Agreement
2. After Settling the Project Agreement and before Financial Close
3. After Financial Close and Before the Completion of Design and Construction; and
4. After Completion of Design and Construction.

Section I. Government Contingency Plan:

1. Before Settling the Project Agreement

The Government has moved cautiously towards the incremental settlement of a definitive Project Agreement. Beginning with a non-binding memorandum of understanding (the "MOU") dated November 10, 2014, the Government began its discussions with CCC without any liability. The MOU was followed by a letter agreement and an amended and restated letter agreement to settle an agreed protocol for negotiation (the "LOA").

The LOA contemplated a "'Go' - 'No-Go' Decision" being made only after certain preliminary deliverables were provided. Only after the "'Go' - 'No-Go' Decision" would the Government have any liability.

The LOA was amended several times until a detailed ADA was negotiated. The ADA was very detailed as to the requirements of a Project Agreement.

Under the ADA, the Government has limited its exposure to termination cost by requiring the developer to provide a development cost budget setting out the development cost over the period leading up to Financial Close. The Government reserved its right to terminate the ADA for breach by CCC without cost. If CCC terminates for Government default, the Government's liability to CCC is limited to 120% of the substantiated development costs at that time, but not exceeding the Development Costs scheduled for such date at that time under the development cost budget.

In addition, the ADA provides a number of "Off-Ramp Events" on the occurrence of which, either the Government or CCC could terminate the ADA, and the Government's liability on termination is limited to the substantiated Development Costs not exceeding the scheduled Development Costs without any markup. Failing to reach agreement on the core project documents within 270 days after the Effective Date is one of the "Off-Ramp Events" on which the Government may terminate, subject only to payment of CCC's substantiated development costs, not exceeding the scheduled maximum as at such date.

If the ADA is terminated, the Government would finance the payment of the termination amount by arranging short term credit facilities with local financial institutions.

2. After Settling the Project Agreement and Before Financial Close

After the Project Agreement is settled, the Government's liability for defaulting under the ADA increases to include 120% of the substantiated Development Costs, plus a Breakage Fee, financial advisory fees and lenders' fees.

Under this scenario, Government would finance the payment of the termination amount by arranging short-term credit facilities with local financial institutions. The Government would have to appropriate the necessary funds in such an extraordinary situation and the Government has always met its financial commitments.

3. After Financial Close and Before the Completion of Design and Construction

After Financial Close the Project Agreement and its related agreements will be effective and in full force. If the Project Co defaults in the performance of its obligations and such default rises to the level at which the Government will become entitled to terminate the Project Agreement, the Government must give notice to the Finance Parties under the Finance Parties Remedies Agreement (the "FPRA"). The Finance Parties are entitled to step-in to Project Co to preserve the Project Agreement by remediating Project Co's default or by replacing Project Co with a new project company to assume the Project Agreement. If the Finance Parties do not remediate the Project Co default or assign the Project Agreement to a new project company and the Government terminates the Project agreement the Government must pay Compensation on Termination to Project Co or the Finance Parties. The Compensation on Termination is limited to the amounts described in Schedule 9 to the Project Agreement. In the event of a default by Project Co leading to a termination, the Compensation on Termination payable by the Government is an amount equal to the Fair Market Value of the Project at that time, based on the present value of all anticipated future cash flows less the present value of all anticipated future costs, less any Rectification Costs and damages.

If the Government or Project Co terminates the Project Agreement as the result of one of the events that leads to a potential "no-fault" termination the Government must pay Compensation on Termination to Project Co sufficient to pay out all of the then existing project debt and breakage costs, but not the equity or equity or equity return.

If the Project Agreement is terminated as a result of any event/default described in Section 3 the Government would finance the payment of the Compensation on Termination and the completion of construction of the new terminal as follows:

- a) Government has excellent access to debt capital markets and if required will use this access to finance these payment obligations. . In this case, Bermuda would own the airport.
- b) Re-tender the concession. If there is any difference in funding, Government would need to cover the gap with borrowing or general revenues of the Consolidated Fund.

The Government would have to appropriate the necessary funds in such an extraordinary situation and the Government has always met its financial commitments.

If the Government elects to terminate the Project Agreement for convenience or if the Project Agreement is terminated by Project Co as a result of the Government's default, the calculation of Compensation on Termination payable to Project Co is more generous to Project Co. Compensation on Termination will be equal to the greater of the "no fault" amount and an amount sufficient to repay all Project debt and equity, make whole and return to equity, plus all of Project Co's costs.

The Government can control the risk of electing to terminate for convenience or defaulting on its obligations under the Project Agreement.

In any case, the Government will have rights if Project Co defaults in its performance of its obligations under the Construction Contract and the Construction Contractor issues a termination notice. The Government will have the option of stepping in to the Construction Contract or assigning the Construction Contract to a new project company and thereby keeping the Construction Contractor, CCC, engaged in the project. The Construction Contractor will require payment of its costs associated with the default and the delay but will remain committed to complete the project for the original Construction Contract price. The Government or the new project company will be required to assume the obligation to pay the Construction

Contractor the remaining outstanding payments due over the remaining term of the Constructor Contract in accordance with the terms of the Construction Contract.

Operationally, if the Finance Parties do not step-in or assign the Project Agreement, the Government will be able to assume operations in the existing terminal until it can complete the new terminal building.

4. After completion of design and construction.

After completion of design and construction, the liability for Compensation on Termination will remain as described above. The Government will have the option of assuming the operation of the airport or seeking a new project company to assume the remaining term of the Project Agreement. The Construction Contract will have been fully performed and therefore the step-in rights under the Direct and Collateral Agreement no longer applicable. Potential liability for Compensation on Termination will remain as described above and the Government's financing plans to address this requirement will be as stated above.

Operationally, the Government will have a new terminal building and if the Finance Parties do not step-in or assign the Project Agreement, the Government will assume operation of the Airport with the new terminal.

Section II. Damage and Destruction:

If the airport is damaged or destroyed during the term of the Project Agreement, the Project Agreement will survive and Project Co will be required to rebuild the airport. Insurance will be maintained by Project Co to the satisfaction of the insurance requirements detailed in the Project Agreement. All insurance proceeds will be received by an insurance trustee to ensure that they are available for rebuilding.

The risk of the sufficiency of the insurance coverage will be taken by Project Co. If insufficient proceeds are available to rebuild the Government may exercise its right to terminate the Project Agreement for Project Co default, in which case all of the insurance proceeds would be made available to the Government and the Government could offset any deficiency against any Compensation on Termination otherwise payable.

L.F. Wade Airport Redevelopment Project
Overall Business Case - Entrustment Report
Appendix 13 – Regulatory Framework

Ministry of Finance
Ministry of Tourism, Transport and Municipalities
Government of Bermuda

This report provides an overview of various aspects of the Project that collectively make up the regulatory and governance framework for the Project.

Section I. Airport Governance:

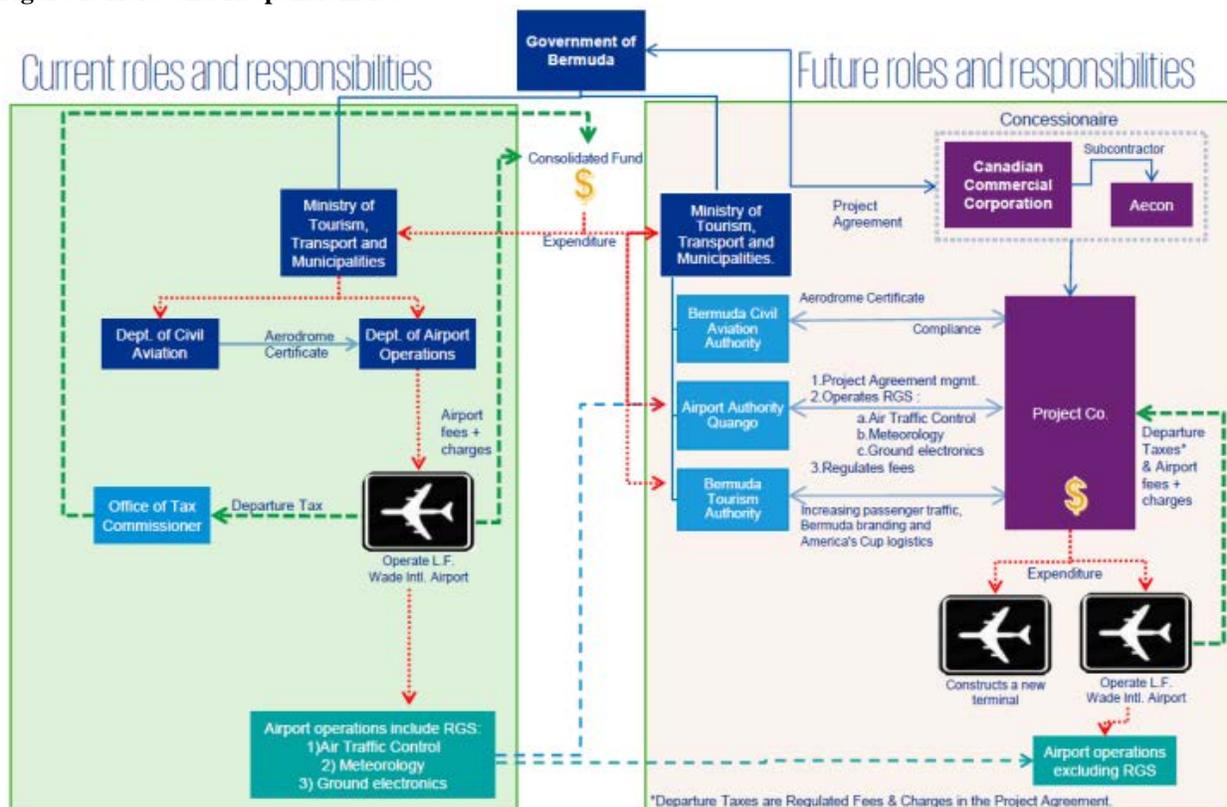
The responsibility for day-to-day operations of the Airport will be transferred to the Project Co being set up by Aecon. The Government’s role will shift from being directly responsible for maintaining and operating the Airport to monitoring Project Co’s compliance with the Project Agreement in terms of budget, schedule and specifications for the construction of the new terminal and standards for operations and maintenance of the Airport.

The Government will provide specific services to Project Co, which are essential to airport operations (i.e., air traffic control, meteorology, ground electronics and air crash and fire rescue).

Separate from this process, a new entity named the Bermuda Civil Aviation Authority (“BCAA”) will assume the responsibilities of the Department of Civil Aviation (“DCA”). This includes the transfer of the Aerodrome Certificate to Project Co.

Figure 1 below illustrates how respective roles and responsibilities will change with the execution of the Agreement.

Figure 1. Roles and Responsibilities



Section II. Setting of Bermuda Airport Authority (“BAA”) & Bermuda Civil Aviation Authority (“BCAA”):

Currently, the Bermuda Government owns and operates the Airport through the DAO and BCAA, which are part of the Ministry of Tourism Development and Transport. The DAO is the airport operating authority, and the BCAA is responsible for aircraft registration, safety regulation, and accident investigation. DAO’s authority to operate the airport is granted through the Civil Airports Act 1949.

During the concession period, Project Co will operate and manage airport operations. In February 2016, Cabinet approved the establishment of a BAA for the operations and management of responsibilities retained by the Government under the ADA. The creation of a new BAA will require new legislation to be drafted and approved by Parliament. The BAA will act in a supervisory capacity to ensure that Project Co operates and maintains the airport terminal in line with the Project Agreement.

The BAA will be funded by the Government through an annual operation grant of approximately \$14.9 million. A portion of that money will be allocated to the retained Government services expenses: Air Traffic Control, Meteorological Services, Ground Electronics, Airport Fire & Rescue, and an Energy Subsidy.

The initial estimate estimates put forward by the DAO, and used as the basis for the analysis in this report, suggested that the annual costs of operating BAA would be approximately ~\$3.5 million. More recent reviews have suggested that cost may drop to ~\$1.9 million, changing the annual operation grant to \$13.3 million. The BAA’s final organization structure is still being determined. The BAA will have a Board that oversees its CEO. Under the CEO will be two main departments with distinct responsibilities. One department will be responsible for Airport Service Delivery and will manage the retained Government services noted above. Their role will be to liaise with related Government entities and manage the vendors that are providing contracted services. The other department will be responsible for Airport Oversight and will oversee Project Co and manage the project agreement using the mechanisms described in Section III below. In some instances, employees of DAO will be migrated to BAA, while other roles will be filled by other government employees, contractors or advisors depending on the needs of the Project at a given time.

To support the Project and facilitate the transaction as documented in the Project Agreement, several legislative changes need to be made to existing laws. This legislation is currently being drafted by a combination of outside legal counsel and the Attorney General’s Chambers. The four enabling pieces of legislation relate to the following: leasing of the airport lands, the establishment of the BAA, the concession agreement, and the regulation of fees. In order to close the deal by December 2016, the enabling legislative changes need to be tabled before Parliament by November 14, 2016. The Second Reading and passing of the legislation should occur on November 18, 2016.

Section III. Contract Monitoring:

Once control of the Airport transfers to Project Co, a multitude of mechanisms will be in place for the BAA to provide oversight over the airport. To provide technical support and oversight during construction, for example, BAA may appoint an Owner’s Representative. Mechanisms like these provide a way for BAA to monitor the PA contract, and the ability for the Government to step in if Project Co is not fulfilling their duties or meeting the stipulated standards.

Item	Mechanism	Description of Mechanism
1.	Monthly Construction Progress Reports	<p>During Phase 1 construction works, Project Co. will produce monthly Progress Reports. The monthly Progress Report will cover all relevant aspects of the construction works, including:</p> <ul style="list-style-type: none"> • specifying the percentage completion of each uncompleted milestone; • highlighting actual or potential departures from the Works Program or other delays or anticipated problems in the Construction; and • stating the proposed measures to be taken by Project Co to overcome the departures, delays or problems.
2.	Construction Quality and Material Inspection	<p>Prior to the Substantial Completion Date, Project Co will, upon request by the Authority open up for inspection by the Authority any part of the work on the Phase 1 Construction Works, which the Authority acting reasonably, believes is defective. This inspection allows for the testing of any materials or plant as provided in the Quality Assurance Manual.</p>
3.	Acceptance Testing for Construction	<p>Not less than six months prior to the estimated date of Substantial Completion, Project Co shall cause Construction Contractor to prepare and provide to the Government detailed test procedures for the Acceptance Tests to be performed in respect of the Construction. Project Co. and the Government shall review and approve the detailed test procedures for the Acceptance Tests in accordance with the provisions of the Acceptance Tests Review and Approval Protocol.</p>
4.	Authority Certificate of Substantial Completion	<p>Within twenty-one Business Days of receipt of a notice of Substantial Completion, the Authority shall inspect the Phase 1 Construction Works to determine that they are in agreement prior to issuing the Certificate. If the Government agrees that Substantial Completion has been achieved, they may issue a letter confirming that it agrees that Substantial Completion has been achieved. If the Government does not agree, they can specify in writing to Project Co all the conditions that they believe have not been completed. If there is a disagreement, an independent certifier will be appointed to resolve the issue.</p>
5.	Technical Review of Fixed Assets – Facilities Condition Report	<p>The Authority Technical Review will assess the performance and effectiveness of the:</p> <ul style="list-style-type: none"> • scheduled maintenance and the life cycle work completed over the previous five year period • the work planned and scheduled for the upcoming five-year period in accordance with the Operations and Maintenance Plan, life cycle plan and other Airport operations, obligations, scope and service specifications. <p>The first report is set to be issued at the Substantial Completion Date. The Technical Review of Fixed assets is to ensure that the Fixed Assets and Mobile Equipment are and will be maintained in a condition which is consistent with due performance by Project Co. of its obligations under this Agreement. Disputed deficiencies will be handled by independent review by a duly qualified and independent engineering firm. If a deficiency is found a remediation plan will be Remediation Plan will be prepared and the issues will be remediated.</p>
6.	Monthly Operations, Maintenance Report	<p>Project Co. will prepare a monthly report summarizing its performance of the Airport Operations for the Government. The monthly report will track the performance of the airport operations following the Key Performance Indicators set forth in Appendix 4B of the Airport Plan and will be</p>

Item	Mechanism	Description of Mechanism
		<p>compared to the prevailing Operations and Maintenance Plan and Service Quality Plan.</p> <p>A detailed list of Key Performance Indicators has been specified in the Project Agreement.</p>
7.	Service Quality Report	<p>Project Co. shall participate in the Airport Council International (ACI) Airport Service Quality (ASQ) Program. Project Co. will commission an ASQ Program survey (“ACI ASQ Survey”) every quarter thereafter. Project Co will achieve a minimum rating on the ACI ASQ Survey of 4.0 for Overall Satisfaction on a 5-point scale at the New Terminal. The ASQ Program is meant to enable Project Co. to obtain feedback on service performance and drive operational and strategic decision-making to see where, through the use of Key Performance Indicators, the Airport under or over-performs and where improvements are required.</p>
8.	New Terminal Performance Monitoring Program	<p>Project Co. will adopt the existing performance monitoring program and key performance indicators for the purpose of the developing benchmark data for development of the New Terminal Performance Monitoring Program and to improve existing Airport operations. Within thirty (30) days after the opening of the New Terminal and at least once every five years, Project Co shall implement an updated performance-monitoring program pursuant to which Project Co will, in part, monitor the delivery of the Airport Services against the Key Performance Indicators.</p>
9.	Airport Service Level Monitoring Report	<p>Project Co will conduct Service Level Monitoring each year on a minimum of five days per year, Service Level Monitoring Days. For each financial year, Project Co will prepare a detailed report of the findings of the Service Level Monitoring conducted in a form acceptable to the Government within thirty days of completion of the last Service Level Monitoring Day.</p>
10.	Periodic Terminal Energy Audit	<p>Following Substantial Completion the Government may, at the Government’s sole cost and expense, commission an Energy audit every five years on each portion of the Airport. The purpose of the audit would be to identify:</p> <ul style="list-style-type: none"> • energy consumption and opportunities for energy savings; • opportunities for using new and existing technologies; and • alternative Energy sources that could be generated on the Leased Premises to reduce Energy costs.
11.	Annual Terminal Energy Analysis Report	<p>Project Co will deliver an Annual Energy Analysis Report to the Authority. The Annual Energy Analysis Report will present findings of actual Energy Consumption for the relevant Energy Year for all parts of the Airport. The report will contain:</p> <ul style="list-style-type: none"> • a summary of the actual usage in MWh over the Energy Year; • a summary of exceptional changes (+/- 10%) in consumption or pattern of use; • data for the new facilities; • utility metering; and • updates on issues identified in prior Annual Energy Analysis Reports.
12.	Audited Financial Statements	<p>Project Co shall provide to the Authority after the end of each fiscal year of Project Co, a copy of Project Co’s audited financial statements including all audits or notations and comments prepared in accordance with GAAP, consistently applied.</p>

Item	Mechanism	Description of Mechanism
13.	Environmental Baseline Report	<p>An Environmental Baseline Reports shall be accepted (“prima facie”) evidence, between the Authority and Project Co. The report will detail:</p> <ul style="list-style-type: none"> • the absence or presence of any Hazardous Substances affecting the soil of, or the water in, on, over, under, coming to or migrating from the Leased Premises; and • the quantity, quality and nature thereof as at the date of the report.
14.	Annual and Quarterly Environmental Update Reports	<p>A quarterly report regarding environmental matters, including:</p> <ul style="list-style-type: none"> • details of any releases that have occurred; • details of any releases that are reasonably likely to occur; • hazardous materials which Project Co. has knowledge of; and • the status of any environmental remedial work ongoing or completed over the period. <p>An annual report should also contain the status of any Hazardous Substances’ on-site treatment, remediation, containment, and temporary storage or disposal arrangements.</p>
15.	Initial Handback Transition Plan	<p>By no later than five years prior to the expiry date of the concession contract, Project Co shall submit to the Authority an initial draft comprehensive transition plan outlining the responsibilities and obligations of Project Co and the Government in relation to the transfer and transition of the Airport Assets. The Handback Transition Plan shall include:</p> <ul style="list-style-type: none"> • Project Co's proposal as to the works required to bring each material Airport Asset into compliance with the requirements of the Handback Condition; • an estimate of the costs necessary to cause the Airport Assets to be in the Handback Condition; • a schedule for the Handback Works; • recommendations for appropriate inspections, reserves and transition protocols; and • such other information as may be reasonably requested by the Government. <p>Within thirty (30) days of the Authority's receipt of the Initial Handback Transition Plan, the Handback Engineer shall provide a report to the Authority and Project Co. detailing its comments on the sufficiency of the Initial Handback Transition Plan and the sufficiency of the Initial Handback Amount.</p>
16.	Handback Engineer Annual Report	<p>On an annual basis, the Handback Engineer shall provide to Project Co. and the Government an additional report setting out:</p> <ul style="list-style-type: none"> • the Handback Engineer's proposals as to any revisions to the Handback Transition Plan or the Handback Works reasonably required in order to ensure that the Airport Assets satisfy the Handback Condition on the Expiry Date; and • the Handback Engineer's estimate of any changes in the Handback Amount as a consequence of construction cost changes, or revisions or additions to the Handback Works.
17.	Terminal Handback Inspection	<p>Not later than forty-five (45) days prior to the Expiry Date of the contract, Project Co and the Authority shall, together with the Handback Engineer, conduct a joint Handback Inspection of the Airport Assets.</p>

Item	Mechanism	Description of Mechanism
		Not later than thirty (30) days prior to the Expiry Date, the Authority shall either issue to Project Co. a Handback Certificate certifying that the Airport Assets comply with the Handback Conditions or notify Project Co. in writing a Refusal Notice.
18.	List of Comparable Airports to Benchmark Commercial Services	<p>The list should include Airports such that they are readily comparable in terms of the types of commercial services that can and should be offered to passengers at the Airport. The pool of possible Comparable Airports shall include airports that:</p> <ul style="list-style-type: none"> • serve under 2 million passengers per annum; • are operated by private concessionaires; and • exhibit many of the same or similar distinguishing characteristics. <p>No later than five years after Financial Close, and every five years thereafter, Project Co shall provide the Authority with a list of five airports that it considers to be Comparable Airports, together with written substantiation for such selection.</p>

Section IV. Capacity Building:

The Government continues to build internal capacity for large capital projects, P3 ventures, and project management. To educate its employees further, the Government, along with KPMG facilitated a workshop that covered:

- Range of P3s vs. the traditional approach
- Benefits and challenges of P3s
- Advantages and consequences of P3s
- How the Government of Bermuda can extract the most value from P3s
- How P3s relate to Bermuda’s Airport Redevelopment Project

Overall, the workshop contributed to an increase in widespread understanding P3s within the Government, and specifically how it related to the Project. Throughout the entire duration of the Project, various opportunities occurred for external advisors to present to Government officials, and to raise and develop awareness and capabilities related to understanding and executing the deal.