



GOVERNMENT OF BERMUDA







L.F. Wade International Airport Redevelopment

The Entrustment Report

November, 2016



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Introduction from Hon. E.T. (Bob) Richards, JP, MP

The L.F. Wade International Airport (“the Airport”) has outlasted its useful life and requires major repairs and renovation to remain operational. Since the Airport Master Plan was published in 2006, there has been little doubt that this vital piece of Bermuda’s infrastructure needs to be replaced.

The alternative is to continue to spend an increasing amount on repairs and maintenance to operate the terminal which is highly exposed to inclement weather events by virtue of being situated a few meters above sea level. The Airport’s exposure to significant damage from storm conditions, places the country at risk that our most important international transportation infrastructure may suffer a prolonged period of closure or would have to limit operations. This would be devastating to the Bermuda economy.

The question we face is not whether to act, but rather *how* do we act to ensure the government secures value for money for Bermuda.

After careful consideration of various Project and delivery options, the Government of Bermuda (“the Government”) has decided to undertake a major redevelopment of the airport (“the Airport Redevelopment Project” or “the Project”) using a public private partnership (“P3”) approach. The P3 approach shifts the risk of possible delays or cost overruns on construction to the private partner thereby guaranteeing the cost of the new terminal.

Having a private partner with international experience in building and operating airports will provide Bermudians, residents and visitors with a with a substantially enhanced travel experience which reflects the brand image we have worked so hard to create - a first class destination for business and hospitality.

The Government’s challenge was how to pay for this critical

piece of infrastructure at a time when the Government is trying to balance the budget and reduce the debt that has been accumulated over the past two decades. The P3 approach in addition to the Canadian Commercial Corporation (“CCC”) guarantee have been essential to both financing the Project and providing the lowest possible rate of interest.

Over the coming months, I look forward to breaking ground and construction of the new Airport terminal. One which meets Bermuda’s needs, limits the possibility of critical failures and does so in a way which is affordable.



Hon. E.T. (Bob) Richards, JP, MP
Minister of Finance
November 2016

About this report

This summary provides the highlights of the comprehensive Overall Business Case - Entrustment Report that fulfils the entrustment requirements established by the Foreign Commonwealth Office ("FCO") and addresses the gaps identified in the Deloitte report, dated May 8, 2015.

The report is divided into five sections each addressing the five "cases" which collectively constitute the overall Business Case for the Project:

- Section 1 Strategic Case – demonstrates that the Project is supported by a robust case for change;
- Section 2 Economic Case – describes the analysis undertaken by the Government to optimize value for money;
- Section 3 Commercial Case – shows that the Project is commercially viable;
- Section 4 Financial Case – outlines the Government's view that the Project is financially affordable; and
- Section 5 Management Case – provides evidence that the Project can be delivered successfully.

Of particular note is the Value for Money ("VFM") assessment undertaken by independent consultant, Steer Davies Gleave ("SDG"). The VFM assessment highlights how the Airport Redevelopment Project compares with similar P3 deals and concludes that the Project achieves value for money for the people of Bermuda.

You are encouraged to read the Overall Business Case report in its entirety. However, recognizing the comprehensive and technical nature of the content, this summary report is intended to provide an overview of the key aspects of the Project.

It is important that all Bermuda residents understand the plans for the new airport terminal, including how it will impact on Bermuda's current and future economic and fiscal goals.



The L. F. Wade International Airport

The U.S. Military constructed Bermuda's first land airport in 1940 and maintained it until 1995 when the Government of Bermuda assumed control. When the airport was built it was not without controversy. However, the Airport ushered in a period of more than 50 years of economic growth in the tourism sector.

The Airport has served Bermuda well, but after more than 75 years, numerous storms and even more numerous repairs, the terminal is on borrowed time. The need for a new terminal has been documented and recognized since 2006 when the Airport Master Plan was published. At that time, the cost for a new terminal was estimated at over \$500 million.

In the ten years since the Master Plan, the challenge to maintain the aging infrastructure continues to increase. Bermuda has been fortunate that the airport has been able to function, with minimal disruption. However, as the current terminal is only a few meters above sea level, the reality is that maintaining the building to an acceptable level is a daily struggle for airport employees. High rains cause flooding and the roof leaks. Major equipment, such as escalators which have been damaged by past storms, experience frequent break downs and require constant repairs.

In Bermuda's current economy and fiscal environment we cannot afford to spend what would now be approximately \$575 million in 2016 dollars to replace the terminal in line with the Airport Master Plan.

The Government established what it could afford and began to negotiate the P3 deal with CCC and AECOM to deliver a purpose-built and efficient airport that will mitigate the risk of infrastructure failure and enhance Bermuda's brand.

After careful financial analysis, the affordability cap was established at approximately \$250 million or less than half of what the 2006 design would have cost. The new terminal will include:

- Jet bridges that improve accessibility for the elderly and travellers with mobility challenges;
- Efficient processing capabilities using current technologies (e.g., e-gates);
- New amenities including opportunities for VIP lounges both at arrival and departure;
- Energy efficiencies; and
- Bermuda produced and inspired design and art.



2008 Cost estimate exceeded \$500M.



Contract method: Traditional Procurement.
 • The Government retains the risk of cost overruns and delays.

2015 Cost estimate is approximately \$250M.



Contract Method: Government to Government
 • The Government transfers the risk to the private partner in relation to construction being on time and on budget.

*Before inflation and other adjustments.


The Broader Benefits

While the Government and its partners have undertaken a rigorous process to assess options regarding the airport and has selected the best option from a value-for-money perspective, it is important to keep in mind and understand the broad economic and social benefits of this Project and how it plays a key role in Bermuda's economic future.

Bermuda emerged from a 6 year recession in 2015. Economic recovery and enabling job creation has been and must continue to be a national priority. The core of the strategy has been a two-track approach: improving the Island's attractiveness to international business and rebuilding Bermuda's tourism industry. This Project will support both tracks in a substantial way by providing the gateway for both tourists and international businesses to work, invest and play. Strategic Benefits Include:

- Creating hundreds of jobs in the near future to build the terminal;
- Increasing long-run employment at the airport pre and post completion;
- Creating a more comfortable, safe and pleasant travelling experience for residents, business visitors and tourists;
- Creating long term economic growth without further increasing the national debt; and
- Improving the resiliency of the airport to withstand major storms and avoiding expensive and costly repairs.

Bermuda's success is partly dependent on its relationship to flows of capital, international business and tourists. It is essential that residents, investors and tourists be able to access the island comfortably, efficiently and reliably. This Project is a key enabler of the future economic success of the island.



Project Co will increase airport operations staffing by over

30%

According to AECON's Labour Plan there will be: full time equivalent jobs created, the majority of which are expected to be filled by Bermudian labour during the construction phase.

445



Plus additional new opportunities for commercial enterprise and other indirect employment benefits.

Options for the future

Numerous options were considered in assessing how to address the current challenges of operating and maintaining the Airport. In assessing the options the following objectives were considered.

- Increasing efficiencies, capacity, and safety of airport operations;
- Stimulating the economy through investing in critical national infrastructure;
- Building the brand value of Bermuda; and
- Ensuring the sustainable long-term operations of the Airport.

Along with the above objectives and operational considerations, the Government identified four Critical Success Factors. These factors are considered critical to the success of the Project and acted as a basis to assess the options.

Strategic business fit: To proceed with any proposed option, the option had to align with the strategic business fit of the Government and the Department of Airport Operations (“DAO”), considering the DAO’s spending objectives, existing arrangements, business needs, and service requirements.

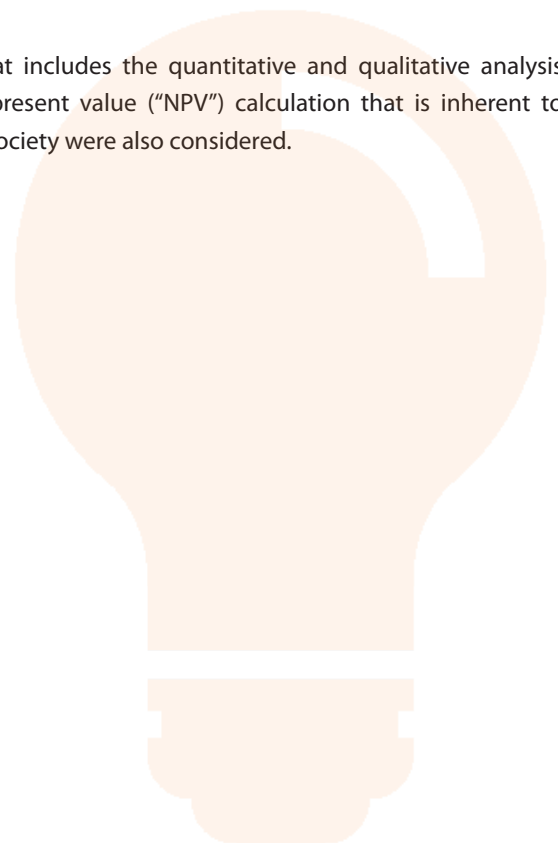
Government affordability: In order for the Project to be successful, the option selected must be affordable. In this case, affordability relates to the capacity of the Government to fund the life cycle cost of the Project given its existing fiscal obligations.

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.

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 a net present value (“NPV”) calculation that is inherent to the analysis, qualitative benefits and risks to both the organization and wider society were also considered.

To ensure the sustainable long-term operation of the Airport, key business drivers were considered, including:

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



Options for the future (cont.)

The following three options are presented for illustrative purposes but summarize the choices faced and the financial, social and commercial impact of those choices.

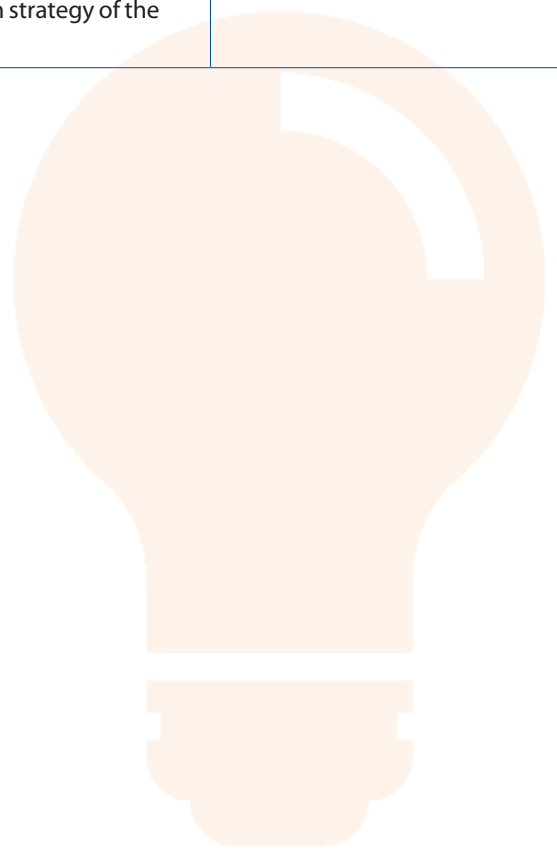
OPTION 1 - STATUS QUO

1 Option 1 involves undertaking the most urgent repairs and safety considerations, including avoidance of capital expenditure unless urgently required for safety or legal compliance. This is the “status quo” option.

Summary of advantages and disadvantages including high level capital cost:

Advantages	Disadvantages	Capital Costs
<ul style="list-style-type: none"> • Capital costs are limited to essential repairs; • No transaction costs; and • The Government would retain the net cash flows generated by the airport. 	<ul style="list-style-type: none"> • Risk of critical failure from weather-related damage and high cost of major emergency repairs; • No improvement in airport amenities; • Risk of increased health and safety liabilities; • Increased demand on management time to address facilities management rather than operations; • Increasing maintenance and repair costs, which will not resolve the underlying structural problems; • Defers, but does not eliminate, the need to replace the terminal; and • Reliability and capacity issues may undermine the international business and tourism growth strategy of the island. 	<p style="text-align: center;">\$184+* Million</p>

* In 2016 dollars. Subject to significant cost overrun risk.



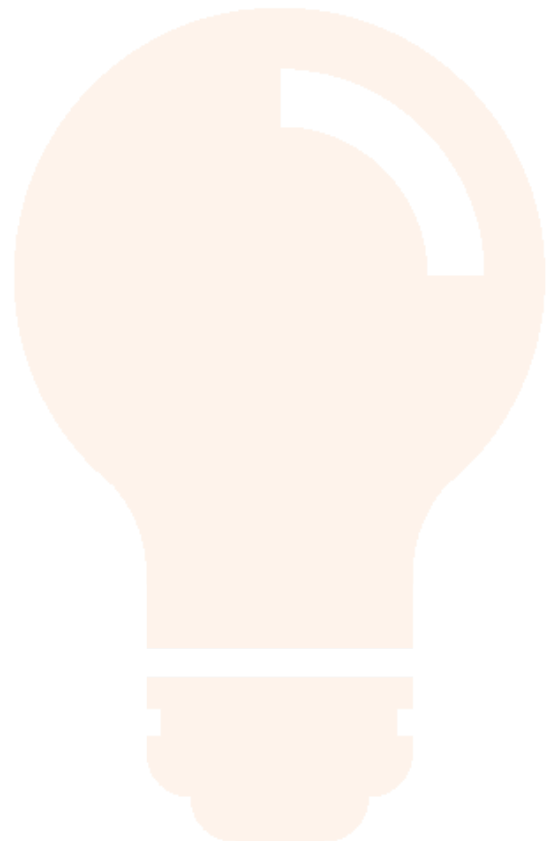
Options for the future (cont.)

OPTION 2 - GOVERNMENT REBUILDS AIRPORT AT ITS EXPENSE

2 Opinion 2 involves the Government designing and building the Airport terminal at its expense, including borrowing to finance construction.

Advantages	Disadvantages	Capital Cost
<ul style="list-style-type: none"> • Government has full control over design and construction; • The Government retains the net cash flows generated by the airport; • Maintenance expenditures would be lower going forward; • Enhanced customer experience; • Efficient passenger processing; and • New terminal would have better protection from hurricanes and storm surges as a result of improved location. 	<ul style="list-style-type: none"> • Government control of design exposes Government risk of “scope creep”; • Government is exposed to design and construction cost overruns; • Government has full capital funding obligation; • Government borrowing would increase national debt and could negatively impact Sovereign credit rating; and • No optimization of capital cost vs. operations and maintenance cost. 	<p style="text-align: center;">\$575+* Million</p>

* Based on 2006 Airport Master Plan and adjusted to 2016 dollars. Subject to significant cost overrun risk.



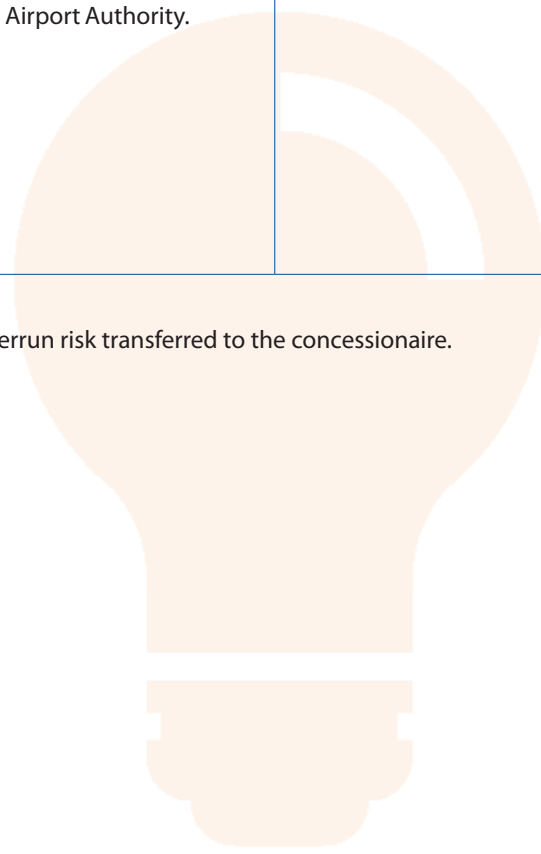
Options for the future (cont.)

OPTION 3 - DESIGN BUILD FINANCE OPERATE MAINTAIN (DBFOM)

3 Option 3 involves a single private sector enterprise 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 control.

Advantages	Disadvantages	Capital Cost
<ul style="list-style-type: none"> • Integration of design/construction with operations allows optimization of capital cost vs. operating cost; • No “finger pointing” over premature failure or warranty claims; • Limited financial risk to Government, which is insulated from construction price risk through a fixed price construction agreement; • When structured through the Canadian Commercial Corporate “Prime” structure, the Government transfers to Canadian Commercial Corporation (“CCC”), “on time; on spec.; on budget” construction Project delivery risk; • Financing cost is lower than Government borrowing due to the CCC guarantee; • Cost of construction is borne by users of airport through passenger fees rather than payments by the Government; • Private sector is responsible for financing the development of the airport terminal and therefore, there are no incremental financing impacts to the Government and no impact on its sovereign credit rating; • 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; and • The Government shares in the upside cash flows of the airport during the concession through a defined sharing mechanism. 	<ul style="list-style-type: none"> • Loss of flexibility to introduce new uses or services; • Transactions can be very complex since there is full integration of construction with facility operation services; and • Need to create Project agreement management and regulatory function through the Bermuda Airport Authority. 	<p>\$302* Million</p>

* \$256m adjusted for inflation, demolition and contingency costs. Cost overrun risk transferred to the concessionaire.



Value for Money Assessment:

The Government of Bermuda commissioned Steer Davies Gleave (“SDG”) to undertake an independent Value for Money Assessment of the Project to finance and construct a new airport terminal at Bermuda’s L.F Wade International Airport.

This assessment looked at a number of strategic, economic and financial factors to rank and determine the relative strengths of options versus the status quo.

The assessment found that the option chosen by the Government shows a clear alignment with the Governments goals and objectives. That is the key reason why the Government decided to move forward with this P3 option backed by the CCC guarantee.

In the following areas: the selected option was considered superior or equal to the status quo and 7 other options.

CRITERIA	SELECTED OPTION EQUAL TO OR SUPERIOR TO OTHER OPTIONS
Create a more environmentally sustainable, efficient and cost effective airport (consuming less water and energy)	✓
Stimulate the Bermudian economy and maximize employment	✓
The Project does not require any third-party Government financial guarantees	✓
The Project requires no Government capital investment and minimal ongoing expenditures	✓
The Project transfers commercial and financial risks of the airport operations to the private sector	✓
The Project involves the airport operations being undertaken and managed by internationally respected experts	✓
The Project ensures the airport operator is motivated to market and promote Bermuda as a destination for tourists and business travellers	✓
Maintain Government control of critical airport infrastructure (Air Traffic Control, Fire and Rescue Emergency response)	✓
Ensure the airport’s operations are overseen by a dedicated regulatory authority and a management contract including “market standard” terms and conditions, including risk management rights and remedial protections	✓
Increase the long term commercial opportunities for Bermudian owned businesses at the airport, such as retail, food & beverage and other value-added services	✓
Agree a “fixed price/ design specific” airport construction guarantee from a AAA credit rated entity to build the airport “on time, on spec and on budget”	✓
Avoid any sale, assignment or transfer of Government owned land, buildings or real estate	✓
Provides protection to the Government of Bermuda from the airport operator earning excessive profits and allows the Government direct participation in upside revenue sharing	✓

* In only one area was the selected option not equal to or superior to other options: in regards to risk transfer, the privatize option would have transferred more risk to the private sector.

In summary, the selected option was the option that most closely met the Government’s objectives across all scenario categories:

CRITERIA			STRATEGIC CASE	FINANCIAL CASE	ECONOMIC CASE
PUBLIC RENOVATION WITH INVESTMENT	LOW	A1	✗	✓ ✓ ✓	✗
	MEDIUM	A2	✗	✓	✗
	HIGH	A3	✓	✓	✓
NEWTERMINAL	C&M	B1	✓	✓	✓ ✓ ✓
	DBFOM	B2a	✓ ✓	✓ ✓ ✓	✓ ✓ ✓
	DBFOM	B2b	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓
	DBO	B3	✓	✗	✓ ✓ ✓
	DB	B4	✓	✓	✓ ✓
	DB+O&M	B5	✓	✓	✓ ✓ ✓
PRIVATIZATION		C1	✗	✓ ✓ ✓	✓ ✓ ✓



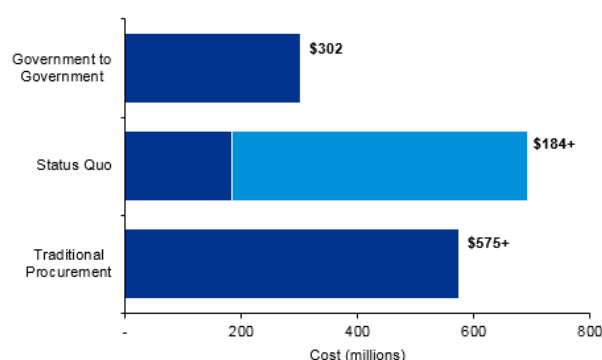
Government to Government (G2G)

The Government of Bermuda elected to use a G2G approach as the benefits of the reduced cost of financing combined with the Government of Canada guarantee on delivering the new terminal on time and on budget are significant benefits that could not be obtained through a traditional procurement process.

This option preserves the advantages of the DBFOM model, but benefits from the lower cost of capital. Key Elements include:

- 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”;
- The 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 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 employment of Bermudian labour for both the construction and operations phases of the Project;
- The financial model will avoid capital expenditures by the Government to renovate the existing terminal or build the new terminal, 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; and
- Upon any failure of the Project or for national security interests, the Government will have appropriate “step-in” rights to take over full possession and control of the airport.

Upfront Capital Costs



Project Credit Rating:

The CCC guarantee reduces the cost of financing for the Project. If the Government assumed the debt (design build option) it would likely increase the Government’s cost of borrowing thereby increasing the cost of debt service.



For more information:

Further information and updates on the L.F. Wade International Airport Redevelopment Project can be found at:

Project news and updates

The Government of Bermuda website: <https://www.gov.bm/airport-redevelopment-Project-arp>

The Government of Bermuda Facebook page: <https://www.facebook.com/dciBermuda/>

Bermuda Airport Redevelopment Project Facebook page:
https://www.facebook.com/AECONBermuda/?ref=page_internal

Jobs

Aecon will advertise jobs openings in The Royal Gazette as needs arise.

Subcontractor Opportunities

Construction firms can pre-qualify at <http://subconprequal.aecon.com/>.

Aecon's Airport Redevelopment Internship Program

Internship Program details and applications are available on the Bermuda Airport Redevelopment Project Facebook page: https://www.facebook.com/AECONBermuda/?ref=page_internal, by the calling Department of Workforce Development on 297-7714 and through ads in The Royal Gazette. The submission deadline has been extended to November 21, 2016.