

# Sangster International Airport Final Determination

May 6, 2025



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# 1 Introduction

This document sets out the Jamaica Civil Aviation Authority's (The Authority's) final determination on the airport charges that will apply at Sangster International Airport (SIA) for the next quinquennium (QQ3)— i.e. January 1, 2026 to December 31, 2030.

The current rates at SIA are due to expire on December 31, 2025.<sup>1</sup> As required by the Airports (Economic Regulation) Act 2002, the JCAA has conducted an investigation to determine the appropriate charges for QQ3, which is due to start on January 1, 2026.

The decisions made on the appropriate charges at SIA will have significant implications for SIA, airlines, cargo shippers, passengers and other stakeholders in Jamaica. This document incorporates views from interested parties. The Authority would like to thank the airport, airlines and other stakeholders for their positive contributions to its investigation.

Figures quoted in this document are in US\$ and real 2025 prices, unless stated otherwise.

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<sup>1</sup> The rates set for QQ2 were due to expire on December 31, 2024, but the period was extended by one year, as permitted by the Airports (Economic Regulation) Act 2002 and agreed between the Authority and the airports.

## 2 Context for the JCAA's determination

### 2.1 Introduction

This section sets out the process that has shaped the Authority's determination, its relevant duties under the Airports (Economic Regulation) Act 2002, the importance of stakeholder engagement, and the most appropriate form of regulation at SIA. It also considers the concession fees paid by MBJ Airports Limited (MBJAL), the operator of SIA, to the Airports Authority of Jamaica (AAJ) and the taxes imposed on airfares by the government. While the concession fee and taxes are outside of the Authority's remit, they provide important context for the review.

### 2.2 Statutory context to the JCAA's investigation

The Airports (Economic Regulation) Act 2002 ('the Act') provides the statutory context for the review. The Act mandates that the Authority must, at the end of each five-year period, make any modifications to the conditions imposed on airport charges that it considers appropriate for regulating the maximum amounts that an approved airport operator may levy.<sup>2</sup> The Act also states that the Authority must conduct a comprehensive review of the airport operators' business and operations and the environment in which they function.

The rate review process is a major programme of work and it is important that the Authority's decisions are well supported and subject to appropriate consultation. The final determination is therefore based on a process that commenced in 2024, for which the key milestones are outlined below.

- Publication of JCAA's consultation document, outlining the proposed timetable, consultation process, and framework for the review.<sup>3</sup>
- Publication of our business plan guidance, outlining the information that is required from airports and users, and to help the airports in putting together their forecasts, business plans and airport charges proposals for QQ3.
- First consultation between the JCAA and stakeholders, and between the airports and stakeholders. Further information on stakeholder engagement is included in section 2.4 below.

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<sup>2</sup> See Subsection 10 (5)(b) (Mandatory conditions for scheduled airports).

<sup>3</sup> JCAA (2024), 'Consultation Paper: QQ3 Sangster International Airport', July.

- Publication of the JCAA's Key Issues paper, setting out the Authority's initial views on the key issues for the QQ3 review.<sup>4</sup>
- Submission of airports' business plans, charges proposals and supporting documents.
- Publication of the JCAA's draft determinations.
- Post-draft determination consultations between the JCAA and stakeholders.

Upon conclusion of the review, pursuant to Section 12 of the Act, a copy of the report is required to be submitted to the Minister of Transport. This report must detail the investigation and consultations undertaken. A copy of the report should also be submitted to the airport operator.

The Authority's duties, set out in the Act, need to be central in setting the rates for the next review. In this respect, our duties are:

- to further the reasonable interests of users of airports within Jamaica, and to provide economical and reliable services to those users by establishing a system for regulation of the airports that takes account of those interests;
- to promote the efficient, economic and profitable operation of airports;
- to ensure compliance with Jamaica's international obligations, as notified by the Minister;
- to create an enabling environment for potential investors in airports;
- to encourage investment in new facilities at airports in time to satisfy demands by users of the airports;
- to impose restrictions on the operator as consistent with the performance by the Authority of its functions;
- to further vital public interests as notified to the Authority by the Minister;
- to ensure the airport is operated in accordance with performance standards and service levels that are consistent with industry best practice.

The duties are given equal weight, so some may need to be prioritised over others in decision-making. In this document the trade-offs are set out in taking decisions on specific factors.

In addition, in making decisions when exercising our functions under this Act, reasonable standards of procedural fairness and the rules of natural

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<sup>4</sup> JCAA (2024), 'Key Issues for the QQ3 regulatory review', August.

justice must be observed as well as acting in a timely fashion. Therefore, the Authority must:

- consult with persons who are likely to be affected by a decision;
- give to such persons an opportunity to make submissions and to be heard by the Authority;
- have regard to the evidence adduced at any such hearing and to the matters contained in any such submissions;
- give reasons in writing for each decision.

The Act also requires that, in determining whether to approve airport charges, the Authority shall take account of:

- its objectives (listed above);
- the efficiency of the operations;
- compliance with quality and performance standards;
- performance by the operator in terms of commitments undertaken under the conditions by which it was approved as an airport operator;
- whether the proposed charges would be reasonable in light of the services provided;
- whether the proposed charges can be justified, taking into account revenue from all sources from the airport's operations, including aeronautical and as much of the non-aeronautical revenues as the Authority deems appropriate.

### **2.3 Aerodrome safety and aviation security considerations**

In the 'Key Issues' paper, the Authority noted that "evidence of whether any additional costs related to the fulfilment of airport's regulatory safety obligations are required should also be included in airport business plans and forecasts, as relevant."<sup>5</sup> These regulatory safety obligations refer to aerodrome safety and aviation security.

As it relates to compliance with the Jamaica Civil Aviation Regulations (Schedule 21), the JCAA Manual of Aerodrome Standards and ICAO Annex 14, currently MBJ Airports Limited is compliant and no major capital expenditure for any deficiencies has been identified.<sup>6</sup>

On the topic of aviation security, however, the Authority noted that MBJAL "needs to reconfigure their main screening checkpoint, upgrade their screening equipment and have the requisite trained and contracted

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<sup>5</sup> JCAA (2024), 'Key Issues for the QQ3 regulatory review', August, p. 26.

<sup>6</sup> JCAA (2024), 'Email: Aerodrome safety & Aviation Security Considerations for QQ3', November 26.

security personnel to implement their security programmes effectively.”<sup>7</sup> In addition, the Authority noted that an audit by USAP-CMA 2024 found that one key deficiency in the resources and facilities required for aviation security was the shortage of consumables such as swabs for the explosive trace detection equipment at the level 3 hold baggage system at SIA.

In an email communication to the Authority, MBJAL confirmed that x-ray machines at screening checkpoints have been upgraded in line with international standards and local regulatory requirements. In addition, MBJAL communicates deficiencies to the Port Security Corps (PSC), which is responsible for training MBJAL’s personnel and instituting corrective action plans where necessary.

With respect to the concerns raised about a shortage of consumables at the SIA level 3 hold baggage system, MBJAL has indicated that this issue was corrected on the same day. While the swabs were available at the security centre, and were collected by PSC officers and moved to the level 3 baggage screening area, the swabs were not present at the time of the inspection. The Authority’s security inspectors were informed of this development at the time.

To this end, the Authority is satisfied that the deficiencies identified have been sufficiently addressed.

## **2.4 Stakeholder engagement**

Stakeholder engagement is a central feature of the regulatory framework that the Authority has established for SIA. The ‘Key Issues’ paper<sup>8</sup> notes that where there is evidence of good customer engagement, and in areas where there is broad agreement between the airport and stakeholders, there may be less regulatory scrutiny.<sup>9</sup>

During the first consultation process, all parties who provided responses agreed with the need for stakeholder engagement and acknowledged the benefits it could bring. The Fair Trading Commission (FTC) advocated broadening the scope of stakeholder engagement, recommending that airports consult regularly with stakeholders on the structure of charges and gather input and concerns about charge adjustments. The FTC also highlighted the need for broader stakeholder inclusion from a diverse range of voices, including those currently unrepresented.

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<sup>7</sup> JCAA (2024), ‘Email: Aerodrome safety & Aviation Security Considerations for QQ3’, November 26.

<sup>8</sup> JCAA (2024), ‘Key Issues for the QQ3 regulatory review’, August.

<sup>9</sup> Less regulatory scrutiny may be applied in some areas, with the exception of highly technical areas, such as setting the regulatory asset base (RAB) and estimating the weighted average cost of capital (WACC). JCAA (2024), ‘Key Issues for the QQ3 regulatory review’, August, p. 7.

A range of views was expressed about the Authority's role in stakeholder engagement. For example, the International Air Transport Association (IATA) indicated that it would welcome a greater role for the Authority, suggesting that the Authority attend all consultations between the airports and stakeholders as an observer.

While the Authority concurs with the views expressed on the importance of stakeholder engagement, it does not consider that it should have a role as an observer or facilitator of these stakeholder consultations. It is important to maintain the Authority's independence, and ensure that its presence does not influence stakeholders' positions.

MBJAL has provided detailed minutes from a consultation held in July 2024 to inform the development of its Airport Master Plan, which included meetings with several airlines and other stakeholders. To inform the development of its business plan submission for the QQ3 review, MBJAL then met with airlines and IATA representatives in October 2024, for which it has also provided detailed minutes. Its business plan notes that 'feedback from IATA and the airlines focused on the need for greater details on the proposed capital program. MBJAL has committed to engaging IATA further regarding the items raised.'<sup>10</sup>

MBJAL has also indicated that it holds consultations with airlines and stakeholders through periodic meetings with the Airline Operators Committee (AOC) and with the Facilitation and Aviation Security (FALAVSEC) Committee. It also regularly consults with the Board of Airline Representatives of Jamaica (BARJ) on the annual yield adjustment, as well as with the AAJ on a quarterly basis.

The Authority recognises the effort made by MBJAL to engage with airlines and other stakeholders over the course of this review so far. However, based on the evidence submitted in its business plan and subsequently, there are areas for improvement in its stakeholder engagement.

While the Authority recognises that MBJAL regularly holds meetings and consultations with stakeholders, only one meeting seems to have been held to directly inform the development of its QQ3 business plan. To this end, in the draft determination, the Authority requested further details on how MBJAL intends to deepen the level of engagement with its stakeholders over QQ3. MBJAL has responded that it will provide the JCAA with the schedule and attendance of meetings with its stakeholders,

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<sup>10</sup> MBJAL (2024), '3rd Quinquennial Airport Charges Review Submission to Jamaica Civil Aviation Authority', October, p. 25.

including airlines through the AOC. The Authority welcomes this, and also requests that MBJAL provides minutes for these meetings and clearly indicate where stakeholder engagement has informed positions for the QQ4 review and beyond. This is particularly in light of concerns raised by IATA and the FTC regarding appropriate consultation with airlines on the airport's investment plans, discussed further in section 5.2.4 below.

## **2.5 Form of regulation**

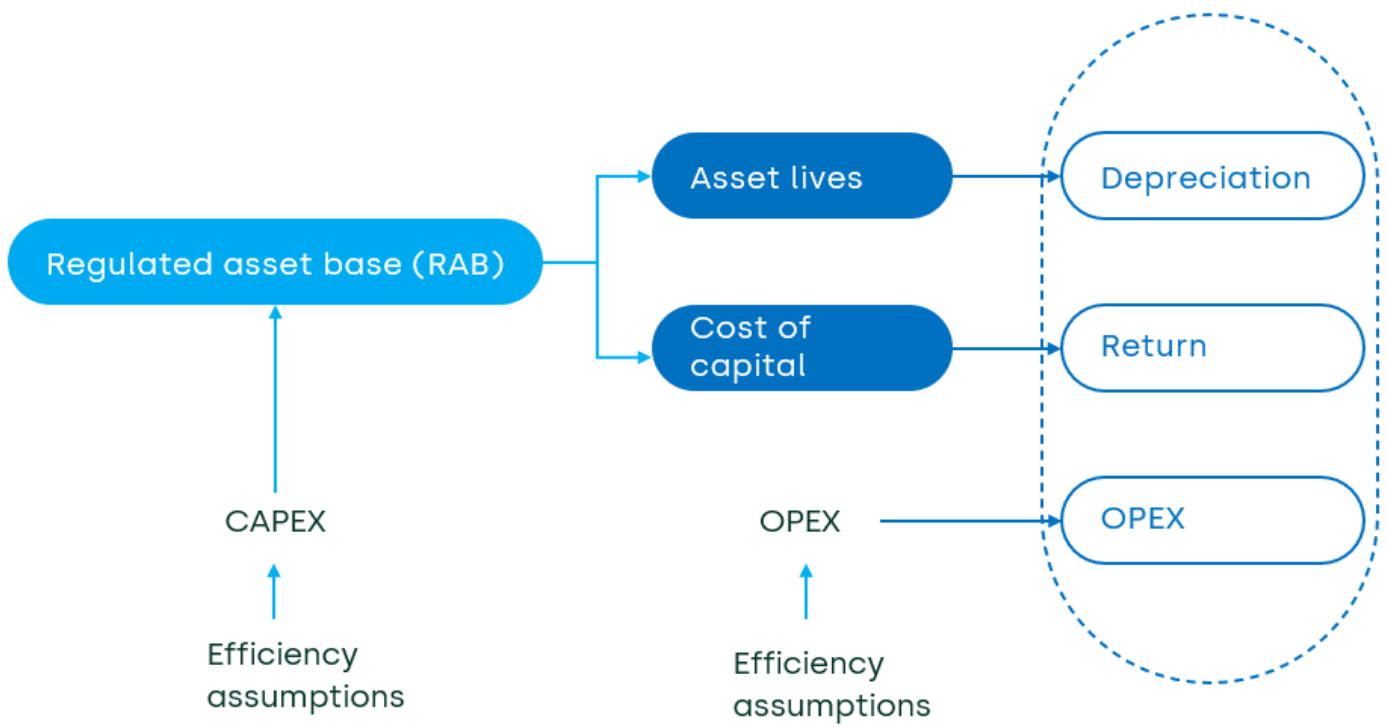
In QQ2 the Authority introduced an incentive-based form of regulation based on an ex-ante charge control that caps charges at a level that allows the company to recover the efficient level of costs incurred in providing the regulated services. However, under this form of regulation, the company also bears the risk of lower profits, or even losses, if it fails to control its costs and meet the regulator's forecasts. Typically, regulated charges are set on a forward-looking, real-term basis—i.e. they are adjusted for inflation through a formula based on the principle of  $CPI - X$ , where CPI reflects consumer price inflation and X an efficiency factor.<sup>11</sup>

Under this form of regulation, the total revenue requirement is calculated as the sum of depreciation, the efficient level of operating expenditure (OPEX), and a target return on assets. In the case of both SIA and Norman Manley International Airport (NMIA), the concession fee is also included. These building blocks are illustrated in Figure 2.1 below.

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<sup>11</sup> Charges may also be expressed in nominal terms, in which case the company bears all the risk of inflation in the economy varying from the level used in the regulator's forecasts.

Figure 2.1 Building blocks for setting the price cap



Note: CAPEX, capital expenditure.  
Source: Oxera.

In addition to the overall cap, the structure of charges within the cap can affect the type of traffic that is incentivised to use the airport. For instance, charging more at peak than off-peak times may incentivise airlines to shift to off-peak times. Similarly, charges could be set lower for the lower-demand season than the higher-demand season, in an attempt to encourage traffic throughout the year. Some regulatory regimes allow airports flexibility in setting and adjusting the structure of charges within the overall charge cap set by the regulator. The changes are often limited to once or twice a year, and require consultation with users.

As described in the draft determination, many stakeholders, including the FTC and IATA, who responded to the Authority's June 2024 consultation were in broad agreement with maintaining the ex-ante charge control. MBJAL has indicated that, while a lighter-touch form of regulation would be desirable, it recognises that the Authority has made the decision to maintain the incentive-based RAB-WACC approach to retain stability in

the regulatory model. MBJAL has also indicated that the charge cap should continue to be applied on a price-per-passenger basis.<sup>12</sup>

Therefore, the Authority's final determination is to maintain the ex-ante charge control that was introduced in QQ2, as this approach remains appropriate and ensures stability and consistency in the regulatory regime. As in QQ2, the charge cap will be set on a price-per-passenger basis. This provides airports with the flexibility to set the structure of charges and undertake periodic or annual rebalancing of airport charges within overall guidance and approval from the Authority, and based on consultation with users.

## 2.6 Concession Agreement

A Concession Agreement, signed between the AAJ and MBJAL in 2003 for the period up until March 2034,<sup>13</sup> sets out the terms and conditions under which MBJAL operates SIA. As this agreement is due to end just over three years after the end of QQ3, any QQ4 period will be shorter than the typical five-year period. MBJAL has therefore suggested considering an eight-year period as part of setting charges for QQ3 (i.e. until the end of the concession in March 2034).

The Authority understands that changes may be made to the Concession Agreement between the AAJ and MBJAL over QQ3 to address the expiry of the agreement. Therefore, the Authority will consider the appropriate approach to take to QQ4 at the end of QQ3, depending on the situation with the Concession Agreement at this time. However, if it is the case that there is still a three-year period until the end of the Concession Agreement, the JCAA agrees that a lighter-handed review may be appropriate.

MBJAL agrees with this approach but has requested more detail on this lighter-handed review. The Authority notes that the lighter-handed approach is likely to involve less detailed scrutiny of the different parameters.

The Concession Agreement also outlines the fees to be paid by MBJAL for the right to operate the airport. The concession fee consists of two components:

- the fixed concession fee (FCF): a fixed fee<sup>14</sup> per work load unit;
- the additional concession fee (ACF): 45% of the difference between a base revenue benchmark (determined by the AAJ) and

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<sup>12</sup> MBJAL (2025), 'Response to the JCAA draft determination of the 3rd of March 2025', April, p.5.

<sup>13</sup> The original concession term was to March 2033 but was extended by a year to March 2034 in light of the COVID-19 pandemic and its impacts.

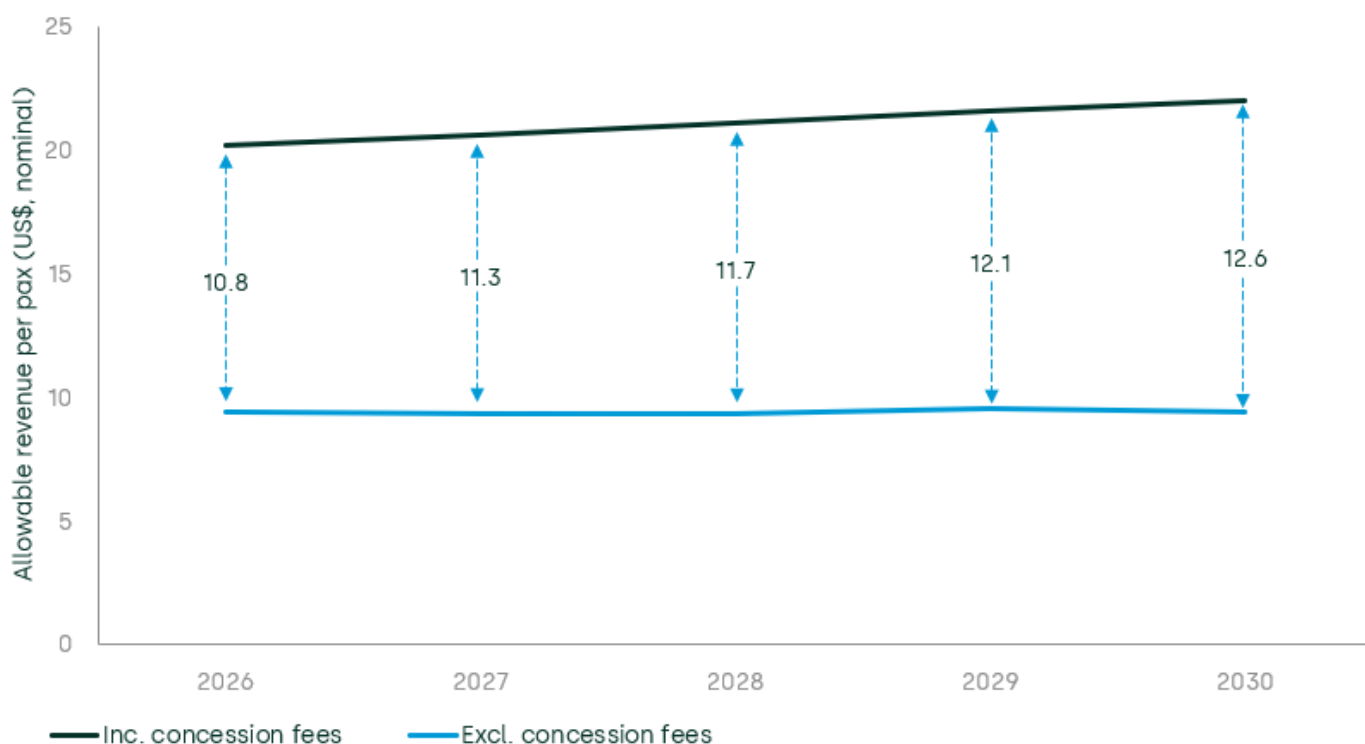
<sup>14</sup> \$2.91 per work-load unit in real terms (2019 price base).

total revenue collected by the airport. Total revenue includes both the FCF and the ACF.

The concession fee, which is paid annually, is a significant sum of money. As the fee is taken into account much like OPEX is in the building-block model (see Figure 2.1 above), it ultimately increases the charges paid by passengers.

In MBJAL's business plan, it forecast that the concession fee collected by the government would increase the per-passenger charge by 115%–135%, or \$10.81–\$12.64, as shown in Figure 2.2.

Figure 2.2 MBJAL proposed charges



Source: JCAA analysis of MBJAL's tariff model.

The concession fee therefore significantly adds to the airport's costs that are ultimately paid for by passengers. This could in turn have a dampening effect on traffic and traffic growth at the airport. In IATA's response to the draft determination, it noted this potential negative impact on traffic, and suggested that the government should re-invest these funds in the industry.

The concession fee arrangements between the AAJ and MBJAL have been taken into account in forming the Authority's determination, and the concession fee has been calculated in line with the approach set out by MBJAL in its business plan submission. However, given that the concession fee is a function of total revenue, if the Authority reaches a different view from MBJAL on the amount of allowed revenue required over QQ3, the concession payments will also change. The impact of the Authority's draft determination on the concession fee is set out in section 10.

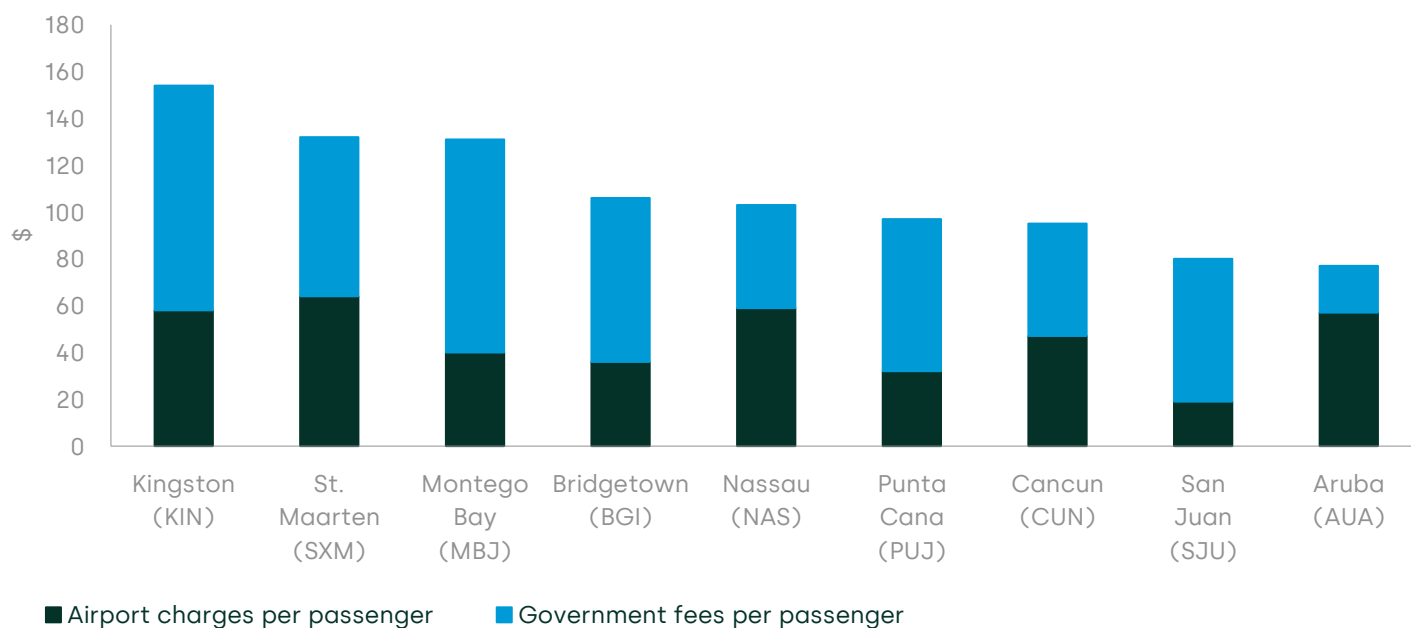
It is also noted that if SIA outperforms the QQ3 determination (e.g. if traffic is higher than forecast), this will lead to an increase in the concession fee paid to AAJ. The incremental concession fee due to this outperformance would need to be recovered by MBJAL from the additional revenues earned on passengers above forecast levels (i.e., on the outperformance). MBJAL does not have the option to seek an increase to airport charges to accommodate any extra concession fee it must pay to the AAJ based on outperformance.

## **2.7 Taxes**

This determination sets the maximum that SIA is permitted to charge airlines at the airport. However, the Authority is conscious that airport charges are only one component of the ultimate airfare paid by passengers.

Another significant component of the airfare is government taxes and charges. As shown in Figure 2.3 below, SIA has estimated that NMIA and SIA have some of the highest airport charges per passenger in the region, with a significant proportion of these charges attributable to Jamaican government fees and taxes (including the travel tax and tourism enhancement fee).

Figure 2.3 Airport charges per passenger at NMIA and SIA versus comparator airports



Note: Although this figure is extracted directly from MBJAL's business plan, airport charges have since been revised by both SIA (Montego Bay) and NMIA (Kingston); as such, the most recent proposed airport charges and government fees per passenger may differ from those shown in the figure. The above figure is included to demonstrate the magnitude of charges at Jamaican airports compared to other airports in the region. Source: MBJAL business plan, based on total charges per passenger for a Boeing 737-900 (Narrowbody).

Much like the concession fee, taxes increase the cost for passengers to use the Jamaican airports. As such, traffic or traffic growth may be lower than it would be in the absence of the taxes. The FTC has suggested that the impact of high airport charges, which stem from concession fees, taxes and revenue-sharing, on Jamaica's aviation and tourism sector should be analysed.

The Authority notes that in its response to the draft determination, MBJAL has stated that the Authority 'fails to distinguish between airport charges controlled by MBJAL and government-imposed taxes and fees over which MBJAL has no control.'<sup>15</sup>

The Authority acknowledges that the charges presented in Figure 2.3 above are meant to illustrate the total cost, including the charges the airport cannot control (i.e. the government fees) and what it can control

<sup>15</sup> MBJAL (2025), 'Response to the JCAA draft determination of the 3rd of March 2025', April, p.5.

(i.e. 'airport charges per passenger'). We note that this figure came directly from the MBJAL business plan.

In addition, MBJAL has stated that it believes that taxes should not be taken into consideration when setting the appropriate yield cap for SIA. The Authority confirms that the yield cap is determined based on the building blocks form of regulation detailed in section 2.3 and as set out in the rest of this report. As mentioned earlier in this section, concession fees and taxes are outside of the Authority's remit, but provide important context for the review. This point is discussed further in sections 4.2.4 and 4.2.5.

## 3 Traffic forecasts

### 3.1 Introduction

This section sets out the Authority's traffic forecasts for SIA for QQ3. It provides the background to traffic forecasting, an assessment of MBJAL's forecasts, and concludes with the Authority's final determination of SIA's traffic forecast for QQ3.

### 3.2 Background

Air traffic forecasts are critical inputs to setting the price cap for airports. Ensuring that such forecasts are robust and reliable is crucial for the: (i) setting of charges; (ii) setting allowed costs; and (iii) risk management.

In the five years prior to COVID-19, SIA exhibited strong traffic growth, with a compound annual growth rate (CAGR) of 5.9%, increasing from 3.7m to 4.7m passengers between 2015 and 2019.<sup>16</sup> This may have been due to a number of factors, such as improvements in global economic conditions, increased city-pair connections, and lower airfares.<sup>17</sup> Despite a material reduction in passenger numbers in 2020 and 2021 due to COVID-19, traffic at SIA recovered quickly thereafter, exceeding its pre-pandemic levels by 2023, reaching 5.2m passengers per year.

As part of the QQ2 final determination, the Authority forecast that traffic would increase from 4.9m in 2020 to 5.7m in 2024.<sup>18</sup> Figure 3.1 shows the comparison of outturn and forecast traffic by MBJAL and JCAA for QQ2.

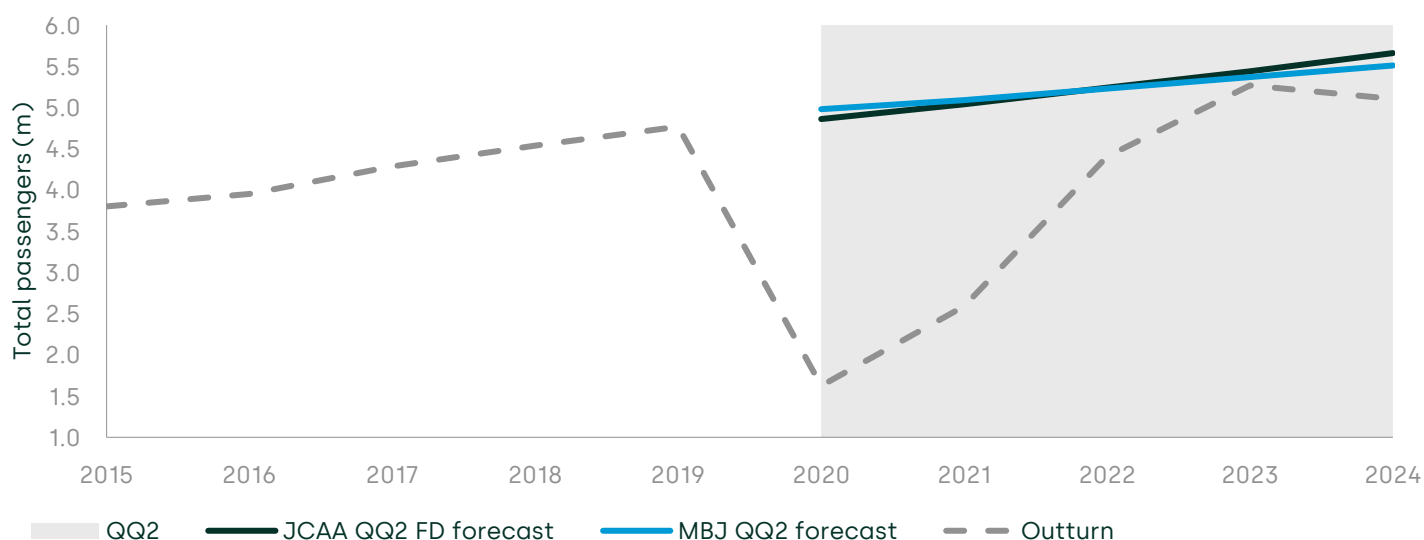
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<sup>16</sup> ICF (2024), 'Montego Bay International Airport: 30-year Long-Term Traffic, OPS and Cargo Forecast', October, p. 17.

<sup>17</sup> IATA (2018), 'IATA Annual Review 2018', June, p. 12.

<sup>18</sup> JCAA (2019), 'Final determination for Sangster International Airport', August, p.22.

Figure 3.1 QQ2 outturn versus forecast traffic



Source: JCAA analysis using traffic data provided by MBJAL following a data request.

As illustrated above, due to the COVID-19 pandemic, traffic on an outturn basis was materially below forecast levels, especially between 2020 and 2022. Although passengers at MBJAL returned from 2023 and exceeded pre-pandemic levels, the numbers were still approximately 0.2m lower than forecast at the QQ2 final determination. Passenger numbers in 2024 also decreased relative to 2023, and continued to be below QQ2 forecasts, due in part to the US travel advisory for Jamaica and aircraft supply issues. This is discussed further in section 3.3.

While passenger numbers at several airports have returned to pre-pandemic levels, there are questions about whether pre-pandemic trends in air travel can be relied on for forecasting future traffic, given the changing nature of air travel post-pandemic. For example, due to the rise of remote work and flexible working arrangements, it is likely that fewer business trips will be made, reducing the demand for business travel relative to pre-pandemic levels.<sup>19</sup> Some of the traffic recovery post-pandemic may also be pent-up demand. This illustrates how important it is to consider whether there are any significant changes (i.e. structural

<sup>19</sup> Bouwer, J., Saxon, S. and Lind, N. (2021), 'Back to the future? Airline sector poised for change post-COVID-19', *Mckinsey & Company*, April 2, <https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/back-to-the-future-airline-sector-poised-for-change-post-covid-19> (accessed December 3).

breaks) in air traffic that need to be accounted for when developing forecasts.<sup>20</sup>

### 3.3 MBJAL's traffic forecasts

In forecasting traffic for QQ3, MBJAL has adopted two approaches:

- a bottom-up approach for 2024 and 2025 using year-to-date traffic and airline schedules;
- a top-down regression-based approach for 2026 onwards, focusing on GDP projections in key markets (i.e. regions/countries to which there is passenger traffic from SIA).<sup>21</sup>

MBJAL's bottom-up approach combines seat capacity and load factor forecasts to produce estimates for the second half of 2024 up to the end of 2025. The capacity forecast uses historical data from 2019, and planned seat capacity published by airlines up to the end of the first half of 2025, alongside industry benchmarks. MBJAL assumes that the load factor for the rest of 2024 and for 2025 is the average of 2019 and 2023. This is due to expected seat capacity being lower than 2023, but higher than 2019, such that the load factor is expected to reach a midpoint between the two years.<sup>22</sup>

For the top-down approach, MBJAL has used an econometric approach to estimate the coefficient of GDP for relevant countries/regions.<sup>23</sup> This GDP coefficient represents the elasticity between GDP and traffic (i.e. the change in traffic expected for a given change in GDP). Since many of the coefficients were higher than the elasticities typically observed in such markets, MBJAL sets a lower elasticity than that estimated by its analysis.

While MBJAL has provided an overview of its approach, it has not supplied the models or the detail underlying its analysis, despite requests from the Authority. Therefore, the Authority is not able to confirm the time period that has been used to estimate the elasticities or the model specification. Following a data request and discussions between the Authority and

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<sup>20</sup> A structural break exists if the relationship between air traffic and the drivers of traffic suddenly change. For example, in the case of business travel, an increase in GDP before the pandemic may have implied more business trips. However, since the pandemic and the growth of remote work, this relationship may no longer hold.

<sup>21</sup> MBJAL (2024), '3rd Quinquennial Airport Charges Review Submission to Jamaica Civil Aviation Authority', October, p. 38.

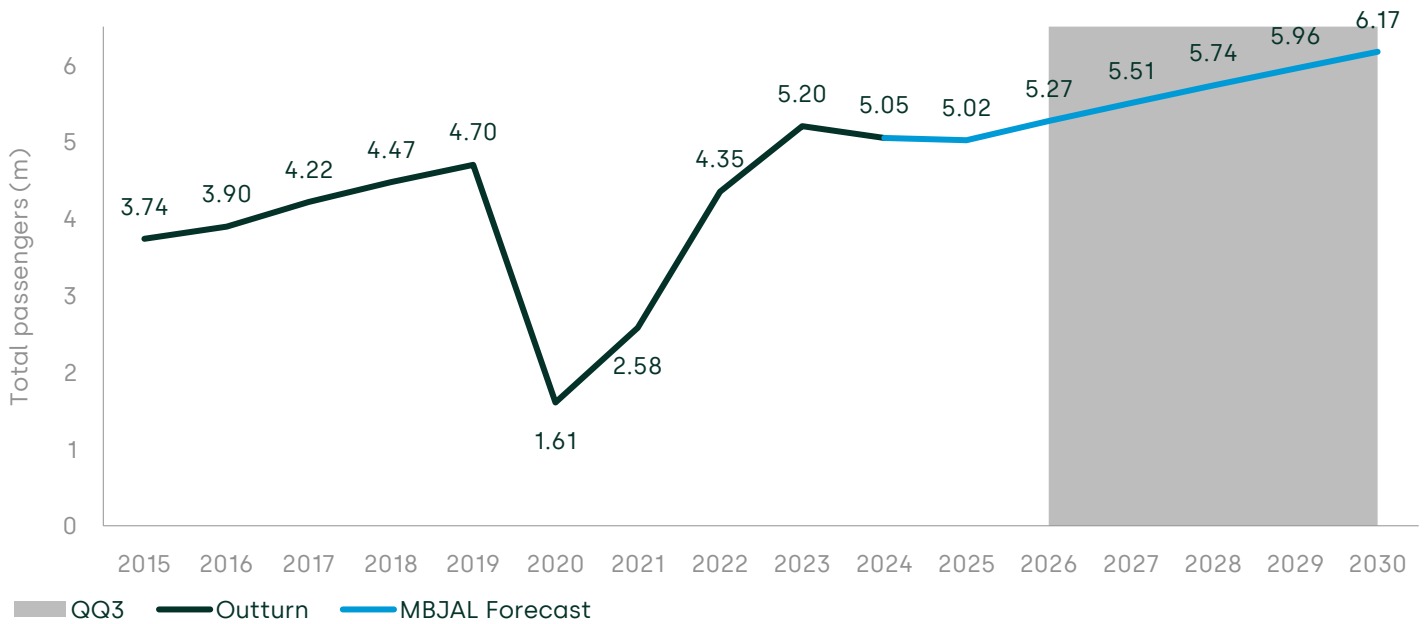
<sup>22</sup> ICF (2024), 'Montego Bay 30-year Forecast Assumptions and Results Summary – Revised – Dec 2024', December, p. 12.

<sup>23</sup> MBJAL lists the following regions/countries used in its top-down approach: (i) United States, (ii) Canada, (iii) UK, (iv) Western Europe, (v) the Caribbean, and (vi) 'Other'.

MBJAL, the Authority believes that the following assumptions regarding the traffic forecasting approach have been made:

- MBJAL has used a modelling period of 2005–19, and has reduced the elasticity over time due to a high estimated coefficient;
- an ordinary least squares (OLS) regression has been used;
- elasticities have been applied to GDP projections for each market;
- projected growth rates in traffic across the regions/country segments in QQ3 are applied to the bottom-up 2025 forecast. This produces MBJAL's final traffic forecasts, as set out in Figure 3.2.

Figure 3.2 MBJAL's traffic forecast relative to outturn



Note: Total passengers excludes transit, transfer and general aviation passengers.  
 Source: JCAA analysis based on traffic numbers provided by MBJAL.

The figure shows that traffic at SIA declined by 2.9% in 2024, which is greater than the modest decline of 0.2% initially forecasted by MBJAL.<sup>24</sup> This was attributed to aircraft availability issues due to Boeing delays, engine issues on Airbus aircraft, as well as the level 3 advisory from the

<sup>24</sup> MBJAL (2024), '3rd Quinquennial Airport Charges Review Submission to Jamaica Civil Aviation Authority', October, p. 39.

US Department of State urging travellers to reconsider travel to Jamaica.<sup>25</sup>

While traffic is not predicted to increase in the short term, MBJAL has predicted an increase in traffic over QQ3, from 5.3m in 2026 to 6.2m passengers in 2030, driven by projected economic growth and more available aircraft.<sup>26</sup> This represents a CAGR of 4.0%, which is lower than the outturn CAGR of 5.9% over 2015–19, although, in absolute terms, the annual growth in passenger numbers is similar between the two periods.

ICF has also provided conservative and high-case scenarios, ranging from 6m to 7m passengers by 2030 respectively.<sup>27</sup> This results in a CAGR range of 2.6–5.8%.

### 3.4 The JCAA's draft determination

The following sections summarise the Authority's position on MBJAL's bottom-up and top-down forecasts in the draft determination.

#### 3.4.1 MBJAL's approach

In the draft determination, the Authority considered numerous aspects of MBJAL's bottom-up approach to forecasting traffic in 2024 and 2025 to be reasonable. In particular, the Authority agreed with the exclusion of seat capacity and load factor data from the pandemic period (i.e. 2020 and 2021) given the unique impact of COVID-19 on air traffic.

Due to timings of the submitted forecasts, the Authority did not use MBJAL's bottom-up forecasts directly. Instead, it used the forecasted growth rate between 2024 and 2025, and applied this to the outturn traffic for 2024.

As discussed in the draft determination, while the Authority agreed with many aspects of MBJAL's top-down forecasts, it also identified a number of limitations. These include:

- (i) the exclusion of recent years (2020–2024) from the modelling period;
- (ii) a high GDP coefficient that was unsupported by evidence and which had to be adjusted downwards;

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<sup>25</sup> Ibid, p. 38.

<sup>26</sup> Ibid, p. 39.

<sup>27</sup> Relative to the base case, the conservative case assumes lower load factors (-3%) with slower-than-expected GDP growth (-0.5%), while the high case assumes higher load factors (+3%) and higher-than-expected GDP growth (+0.5%).

- (iii) use of US GDP only (weighted alongside Jamaican GDP) as a sole driver to explain traffic; and
- (iv) concerns that the GDP forecasts of the US and Jamaica were in nominal terms.

### 3.4.2 The JCAA's approach

Due to the limitations of MBJAL's top-down approach, the Authority estimated an econometric model that improved on MBJAL's approach in the following ways.

- **Using GDP in real terms.** This ensured that the interpretation of the coefficient was not affected by inflation.
- **Inclusion of recent outturn data with a COVID dummy.** The modelling period was extended to include 2020–24 to better reflect the recent trends in air travel. A COVID dummy for the years 2020 and 2021 was included in the model to account for lockdown measures limiting air travel.<sup>28</sup>
- **Use of a weighted average GDP variable that incorporates other regions that affect traffic in Jamaica.** This meant that US GDP was not the sole explanatory factor for predicting traffic to Jamaica.

Using the time period 2011–24, the Authority estimated a model as follows:

$$\text{Log}(\text{total passengers}_t) = \beta_0 + \beta_1 \text{Log}(\text{Weighted real GDP}_t) + \beta_2 \text{COVID}_t + \varepsilon_t$$

Where t = year and the weighted real GDP is defined as the following:

$$\text{Weighted real GDP}_t = \sum \text{Real GDP}_{it} \times \text{Weighting of region}_{it}$$

Where i = country or region.<sup>29</sup>

The weighting was based on the proportion of passengers from the respective region relative to the total passengers at SIA. That is, the weighting on US GDP was based on the proportion of passengers originating from the USA relative to total passengers at SIA.

However, due to data constraints at the time of the draft determination, these weights were based on published seat capacity data. This data provided the seat capacity in an origin and destination (O&D) pairing, but the point of origin was not explicitly set out.<sup>30</sup> Seat capacity was also noted to be representative of supply, rather than demand from each

<sup>28</sup> A dummy variable allows for categorical data to be accounted for in model. In the traffic model, the COVID dummy variable is set equal to 1 if the year is 2020 or 2021, and 0 otherwise. This allows the model to account for differences in traffic attributed to COVID.

<sup>29</sup> We have used the following countries/regions which account for most, if not all, traffic at MBJ: (i) USA, (ii) Jamaica, (iii) Canada, (iv) UK, (v) Caribbean, and (vi) Latin America (LatAm).

<sup>30</sup> MBJAL confirmed that the seat capacity data reflects the origin of a passenger travelling to SIA.

region. Therefore, if load factors differ materially between regions, this may affect the weightings.

Moreover, due to additional data limitations, the weightings for 2019 were applied to all years included in the modelling period prior to 2019, while weightings for 2023 were applied to the years 2020–22. Forecast years were set equal to 2025 weightings. The Authority noted that this was an area it would seek to refine ahead of the final determination using additional data.

Based on its analysis, the Authority estimated a statistically significant elasticity of passenger numbers to the weighted GDP variable at 1.76. That is, a 1% increase in weighted GDP is associated with a 1.76% increase in traffic. This was materially lower than MBJAL's estimate, and more in line with precedent:

- Gallet and Doucouliagos (2014) performed a meta-analysis of income elasticities of travel and found the elasticity of international routes to be 1.546.<sup>31</sup>
- IATA (2008) found that income elasticities for air transport were generally between 1 and 2, and that developing countries 'typically have a greater responsiveness than developed countries'.<sup>32</sup> Long-haul travel from developing countries was also found to exceed 2.
- the ACI (2011) states that 'typically income elasticity values [...] range from 1.0 when applied to mature market segments to 2.5 in the case of rapidly emerging markets', and that 'median values of around 1.5 would be normal.'<sup>33</sup>

While alternative specifications were tested, these models did not perform as well, due to material decreases in model fit, statistically insignificant variables, and/or unexpected relationships.

The Authority's forecasts relative to MBJAL's forecasts in the draft determination are summarised in Table 3.1.

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<sup>31</sup> Gallet, C.A. and Doucouliagos, H. (2014), 'The income elasticity of air travel: A meta-analysis', *Annals of Tourism Research*, November, **52**:1, pp. 141–55.

<sup>32</sup> IATA (2008) 'Air Travel Demand – Measuring the responsiveness of air travel demand to changes in prices and incomes', IATA Economics Briefing No. 9, April, [https://www.iata.org/publications/economic-briefings/air\\_travel\\_demand.pdf](https://www.iata.org/publications/economic-briefings/air_travel_demand.pdf) (accessed 2 February 2025).

<sup>33</sup> ACI (2011), 'ACI Airport Traffic Forecasting Manual: A practical guide addressing best practices', June, [http://www.aci.aero/Media/aci/file/Publications/2011/ACI\\_Airport\\_Traffic\\_Forecasting\\_Manual\\_2011.pdf](http://www.aci.aero/Media/aci/file/Publications/2011/ACI_Airport_Traffic_Forecasting_Manual_2011.pdf) (accessed 2 February 2025).

Table 3.1 Comparison of traffic forecasts – draft determination

		2024	2025	2026	2027	2028	2029	2030	CAGR (QQ3)
MBJAL	Levels (m)	5.04	5.06	5.27	5.51	5.74	5.96	6.17	
	Growth		0.3%	4.2%	4.5%	4.2%	3.9%	3.6%	4.0%
JCAA	Levels (m)	5.11	5.12	5.30	5.49	5.68	5.87	6.06	
	Growth		0.3%	3.5%	3.6%	3.5%	3.4%	3.2%	3.4%

Note: The 2024 figure for JCAA is based on recent outturn traffic data provided by MBJAL.

Source: JCAA analysis.

As shown in the table, the Authority forecasted traffic to increase from 5.30m to 6.06m between 2026 and 2030, with a CAGR of 3.4%. This was lower than forecast by MBJAL, which forecasted an increase from 5.27m to 6.17m over the same time period, with a CAGR of 4.0%.<sup>34</sup> The lower forecast was driven by a reduction in the GDP coefficient (i.e. elasticity) relative to MBJAL's estimates, which was a result of the seat capacity data provided by MBJAL that was used as a proxy for point of origin mix data.

Based on the seat capacity data provided by MBJAL, Jamaica had a weighting of 0%. That is, no passengers were expected to originate from Jamaica. The Authority noted in the draft determination that it considered the use of seat capacity data as a proxy for point of origin mix to raise concerns. It requested MBJAL provide historical point of origin mix data across all years of the modelling period for consideration for the final determination, otherwise it would adopt an assumption of 30% of the origin and destination mix originating from Jamaica, and would adjust the GDP weighting accordingly.

### 3.5 Responses to the draft determination

MBJAL responded to the draft determination with a number of concerns related to the traffic forecasts.

<sup>34</sup> The Authority's forecasts aligned with the lower end of the estimates proposed by MBJAL

- **Real GDP forecasts.** MBJAL agrees with the Authority's approach to forecast GDP in real terms, but believes the Authority's concern that MBJAL had used nominal GDP is unwarranted.
- **Inclusion of passengers not subject to passenger charges.** MBJAL stated that the JCAA forecast for 2024 may have included transfer, transit, and general aviation passengers which are not subject to passenger charges.
- **COVID-19 effects.** MBJAL raised concerns that the COVID dummy variable used to capture the pandemic effects in 2020 and 2021 is too simplistic. Furthermore, it believes that the exclusion of 2022 and 2023 from the COVID dummy may "bias the GDP coefficient estimate upwards as the rapid traffic growth in 2022 and 2023 will be ascribed to GDP alone."<sup>35</sup> MBJAL recommended separate dummies for each of the relevant years (if the analysis allows it).
- **Use of seats as a proxy for point of origin.** MBJAL stated that it is incorrect to use seat capacity as a proxy for the Point of Origin (PoO) mix of passengers.
- **30% point of origin assumption for Jamaica.** MBJAL stated that a 30% point of origin mix for Jamaica is too high.
- **Consideration of more recent traffic data.** MBJAL believes that more recent traffic data indicates a softening in demand which suggests both MBJAL and the Authority's traffic forecasts may be an overestimate.

The Authority notes that, in its consultation response to the draft determination, the FTC acknowledges the robustness of the JCAA's traffic model compared to that of MBJAL. It also suggests that the JCAA validates MBJAL's assumptions with more recent data on seat capacity and origin-destination.

### 3.6 The JCAA's final determination

The Authority has considered MBJAL's concerns and sets out its responses to each point in turn.

#### Real GDP forecasts

The Authority welcomes MBJAL's agreement that all GDP data should be in real terms.

#### Inclusion of passengers not subject to passenger charges

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<sup>35</sup> MBJAL (2025), 'Response to the JCAA Draft Determination of the 3rd March 2025', April, p.10.

The Authority acknowledges that the draft determination traffic forecasts included transfer, transit and general aviation passengers which may not be subject to airport charges. This has been corrected for in the final determination traffic forecasts presented in Table 3.2 below.

### COVID-19 effects

The Authority does not agree that the use of a COVID-19 dummy variable to account for the effects of the pandemic in 2020 and 2021 is too simplistic. The majority of both years were characterised by lockdown measures, which significantly restricted air travel.

The Authority also does not agree that 2022 and 2023 should be included in the COVID-19 dummy. Since restrictions were lighter in early 2022 before all restrictions were lifted in April 2022,<sup>36</sup> this year is not considered to be characterised by the same restriction effects of the pandemic on air travel compared to 2020 and 2021.

Moreover, although 2022 and 2023 exhibited abnormally high levels of traffic *growth* (69% and 19% respectively)<sup>37</sup>, the Authority does not agree with MBJAL's claim that this may bias the GDP coefficient upwards. This claim would be valid if the traffic model was based on growth rates, the first difference in traffic was included as an independent variable, or a time-series model was used. However, due to the small sample size, and to ensure consistency with the methodology implemented by MBJAL in its business plan, an OLS model regressing traffic levels and GDP was used. The following figure shows the underlying data used to estimate the coefficient of GDP on traffic.

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<sup>36</sup> CNW (2022), 'Jamaica lifts COVID test requirements and mask mandates for travellers', April. Last accessed April 16, 2025: <https://www.caribbeannationalweekly.com/caribbean-breaking-news-featured/jamaica-lifts-covid-test-requirements-and-mask-mandates-for-travelers/>

<sup>37</sup> MBJAL (2025), 'Response to the JCAA Draft Determination of the 3rd March 2025', April, p.10.

Figure 3.3 Historical passengers versus weighted average GDP



Note: Observations in blue represent the years that are included in the COVID dummy variable. The line of best fit is based on all observations excluding 2020, 2021, and 2022. Source: JCAA analysis.

As shown above, the majority of observations are close to the line of best fit (based on all years except 2020–2022 which are the years of concern by MBJAL)<sup>38</sup>. The 2022 observation was tested by adding a separate dummy for this year to the draft determination model. However, the 2022 specific dummy was not statistically significant at the 10% level. That is, after accounting for GDP, the Authority finds that a year specific dummy does not help explain traffic in 2022. This may suggest the year is not abnormal in terms of traffic (after accounting for GDP). While the post-pandemic environment may be different to pre-pandemic, we do not consider 2022 (or 2023) warrants a dummy variable, nor should it be included as part of the COVID dummy, since this variable accounts for material effects of COVID restrictions on traffic.

Furthermore, MBJAL's suggestion of a separate dummy for each of the relevant years is not appropriate, given the increased risk of overfitting, which may already be high given the small sample size. Separating the dummies for each year also has the same effect as removing these

<sup>38</sup> 2023 has been included despite MBJAL's concern given there were no COVID restrictions in this year, and it appears to be very close to the line of best fit as indicated by the figure.

observations altogether, which artificially changes the period that the model, and more importantly the GDP coefficient, is based on. Overall, the Authority considers separate dummy variables for the relevant years could make the model less reliable for forecasts.

Overall, we do not consider the GDP coefficient estimate to be biased upwards. In particular, the coefficient is in line with regulatory and academic precedent, and is also materially lower than MBJAL's models (which have a coefficient of above 3). We agree that the potential for a structural break is difficult to determine so soon after the pandemic,<sup>39</sup> and have therefore not included an additional dummy for the pre-pandemic period or an interaction term to reflect changes (if any) in the relationship between income and traffic pre- and post-pandemic.

### Use of seats as a proxy for point of origin and 30% point of origin assumption for Jamaica

While the Authority agrees that available seat capacity is not an optimal proxy for the Point of Origin (PoO) mix (relative to Origin & Destination, O&D, data), seat capacity data was submitted by MBJAL for the draft determination. No origin and destination information was provided despite subsequent requests from the Authority.

We welcome the provision of O&D and PoO mix data by MBJAL, and confirm that this has been used to form the weightings of GDP for the final determination (rather than the 30% assumption for Jamaica, or setting the weights constant to 2019 or 2023 levels). The GDP weightings for the forecast years have also been set constant to 2024 levels for the final determination. In addition, as the O&D and PoO mix data covers the period 2010–2024, the Authority has included 2010 as part of the modelling period for the final determination.

### Consideration of more recent traffic data

MBJAL suggests a decline of 0.6% in 2025 relative to both 2024 traffic and its previous forecasts for 2025, introduces uncertainty into traffic projections.<sup>40</sup> The decline is evidenced by lower outturn traffic in the early months of 2025 relative to the equivalent months in 2024. The Authority considers the use of recent outturn data to revise the 2025 forecast to be reasonable, and therefore accepts MBJAL's revised 2025 traffic forecast.

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<sup>39</sup> MBJAL (2025), 'Response to the JCAA Draft Determination of the 3rd March 2025', April, p.9.

<sup>40</sup> MBJAL (2025), 'Response to the JCAA Draft Determination of the 3rd March 2025', April, p.12.

However, while the Authority acknowledges the uncertainty in future traffic, there is insufficient evidence to suggest that demand would soften further in the long-term, beyond the Authority's initial projections. The Authority also notes that some stakeholder consultations have suggested strengthening demand. For example, Emirates announced new codeshare services between Dubai and Montego Bay (via Frankfurt), improving connectivity and tourism from the Middle East.<sup>41</sup>

Therefore, overall, in the final determination, the Authority has generally maintained its draft determination approach, though with the changes discussed above based on additional clarifications and data provided by MBJAL.

Based on the modifications outlined above, the Authority estimates a GDP coefficient of 1.93. This continues to be in line with expectations from academic literature (see section 3.4.2). While this is a slight increase relative to the coefficient estimate of 1.76 from the draft determination, this is explained by: (i) changes to the passenger numbers to reflect only those passengers that are subject to airport charges; (ii) changes in the GDP weightings to reflect O&D and PoO mix data (instead of available seat capacity); and (iii) extension of the modelling period to include 2010.

The following table summarises the final determination traffic forecasts at SIA for QQ3.

**Table 3.2 Comparison of traffic forecasts – final determination**

		2024	2025	2026	2027	2028	2029	2030	CAGR (QQ3)
MBJAL	Levels (m)	5.05	5.02	5.27	5.51	5.74	5.96	6.17	
	Growth		-0.6%	5.0%	4.5%	4.2%	3.9%	3.6%	4.0%
JCAA	Levels (m)	5.05	5.02	5.23	5.45	5.67	5.89	6.12	
	Growth		-0.6%	4.2%	4.2%	4.0%	3.9%	3.8%	4.0%

Source: JCAA analysis.

As shown above, the Authority has accepted the revised bottom-up forecast for 2025 from MBJAL. The Authority's forecasts, while higher than

<sup>41</sup> Our Today (2025), 'It's confirmed! Emirates flying to Jamaica via code sharing with Condor Airlines', April. Last accessed April 21, 2025: <https://our.today/its-confirmed-emirates-flying-to-jamaica-via-code-sharing-with-condor-airlines/>

its estimates as part of the draft determination, are lower than MBJAL's forecasts. The Authority's CAGR is also marginally lower than that predicted by MBJAL, which is driven by the lower estimated coefficient of GDP on traffic.

## 4 Commercial revenue and till regime

### 4.1 Introduction

The extent to which commercial revenue is deducted from the overall revenue requirement depends on the approach to the till. The Authority first considers the appropriate till regime for QQ3 below, before determining the commercial revenue forecasts for QQ3.

### 4.2 Till regime

#### 4.2.1 Background

Airports derive revenue from two main categories of activities: aeronautical and non-aeronautical (commercial) activities. The distinction between till regimes relates to whether, and the extent to which, non-aeronautical activities are considered when determining the charges that the airport levies. The Airports (Economic Regulation) Act allows for the adoption of any type of till regime.

There are three possible options for the till regime.

1. In a **single-till regime**, the costs and revenues of both the aeronautical and commercial activities of an airport are taken into account in determining the level of airport charges. The cost base includes the overall level of costs required to provide all services at the airport. All commercial revenues are used to offset the cost base and the charges to airlines. The RAB therefore comprises a combination of aeronautical and non-aeronautical assets.
2. In a **dual-till regime**, only the core aeronautical activities are taken into account in determining the level of airport charges, with the airport retaining all non-aeronautical revenue. Airport charges are derived on a stand-alone basis, so aeronautical revenues must cover the costs associated with aeronautical activities only, including a reasonable return on those activities.
3. A **hybrid-till regime** avoids the binary choice between a single and a dual till. Instead, it considers which activities and/or revenues should be included in the till, and/or the extent to which commercial profits should be shared between the airport and users.

In QQ2, the Authority adopted a hybrid-till approach. 70% of commercial revenues were used to reduce aeronautical charges for SIA.

While there are merits in both single- and the dual-till regimes, the Authority considers that a hybrid-till approach continues to be the most appropriate regime for QQ3, for a number of reasons. First, while aeronautical and non-aeronautical services are not perfectly complementary, there are likely to be some demand dependencies between the two. A hybrid-till regime may therefore be optimal in terms of economic efficiency, as it allows an airport to use some of its profits from non-aeronautical activities to contribute to the costs of aeronautical services without the complete cross-subsidy required under a single-till regime, or no cross-subsidy in a dual-till regime. Within the hybrid-till regime, the Authority regards the fixed revenue-sharing option as the most appropriate approach, as it does not require separation of the asset base between the commercial and aeronautical tills.

#### 4.2.2 MBJAL's till regime proposal

While MBJAL has previously expressed its preference for a dual-till, it accepted the hybrid-till approach for the purposes of this rate review. However, it proposed a reduction in the sharing rate from 70% to 60%. MBJAL stated that it does not believe that the current sharing rate provides the optimal incentives for growth in traffic and commercial revenue, or sufficient compensation for investment. MBJAL indicated that the current sharing rate is also affected by the ACF, which lowers the amount ultimately retained by MBJAL.

#### 4.2.3 The JCAA's draft determination

While MBJAL expressed its preference for reducing the sharing rate from 70% to 60%, other stakeholders, including the FTC and IATA, expressed a preference to move towards a single-till regime. The FTC supported a single-till regime, suggesting that it lowers costs for passengers and airlines. It argued that a single-till model encourages innovation and investment in commercial activities, enhancing the overall passenger experience. IATA also favoured the single-till regime, promoting it as a means to create a truly competitive environment.

The Authority considered that a hybrid-till regime was the most appropriate for balancing incentives for airports while keeping charges low for airlines and passengers. Reducing the sharing rate increases airport charges, as the airport retains a greater proportion of its commercial revenues. In the draft determination, the Authority estimated that reducing the sharing rate from 70% to 60% would increase charges by 13% over QQ3. The Authority also did not consider that sufficient justification was put forward for a change in the sharing rate. Therefore, the Authority's position in the draft determination was to maintain the sharing rate of 70%.

#### 4.2.4 Responses to the draft determination

In response to the draft determination, MBJAL restated that the sharing rate should be reduced to 60%. MBJAL's position is that once concession fees are factored in, it retains a low level of non-aeronautical revenues (16.5%) compared to other airports, and that it has taken considerable risk in growing the airport's commercial offering over the past twenty years, including during the COVID-19 pandemic. It also stated that it is a highly efficient airport, with low charges compared to other airports in the region, and low OPEX compared to other Caribbean airports. MBJAL's view is that reducing the sharing rate to 60% would not have an impact on the airport's competitive position.

MBJAL also raised concerns with the Authority's approach to setting the sharing rate which included taking the overall level of charges, which is affected by government taxes, into account. According to its understanding of the Act, charges should be set on the basis of the airport's operating expenses and revenues only, and government charges and taxes should only be taken account insofar as they affect the broader context.

Other stakeholders stated that they support the Authority's proposed approach. For example, IATA and FTC indicated that they do not support a decrease in the sharing rate and would favour an increase in the sharing rate for airports.

#### 4.2.5 The JCAA's final determination

The Authority has carefully considered the case put forward by MBJAL regarding the proposed reduction of the sharing rate.

First, in response to MBJAL's concerns related to the Authority's consideration of concession fees and taxes in deciding its position on the sharing rate, it is important to reiterate that the first duty of the Authority under the Act is to further the reasonable interests of users of airports. The Authority is required to consider the impact of charges on passengers using the airport as well as Jamaica overall. In setting charges, it is therefore important for the Authority to consider the broader context in which charges are set, which includes the existing level of charges taking into account all fees and taxes, and the impact that any decision is likely to have on users of the airport. However, the Authority confirms that these factors are not being explicitly considered in the calculation of rates, which is independent of the level of tax and concession fees.

As the Authority indicated in the draft determination, reducing the sharing rate at SIA from 70% to 60% would lead to a significant increase in charges

over the period.<sup>42</sup> Nonetheless, the Authority notes that MBJAL has made considerable investments in the airport's commercial offering in recent years, including over the COVID-19 pandemic, and this has resulted in strong service quality performance alongside other impacts. As such, the Authority considers that it is appropriate to reduce the sharing rate at SIA from 70% to 65% for the purposes of the QQ3 period. This strikes a balance between adhering to the Authority's duty under the Act to further the reasonable interest of service users and recognising MBJAL's performance. The appropriate sharing rate would be re-visited again in future regulatory reviews.

## **4.3 Commercial revenue**

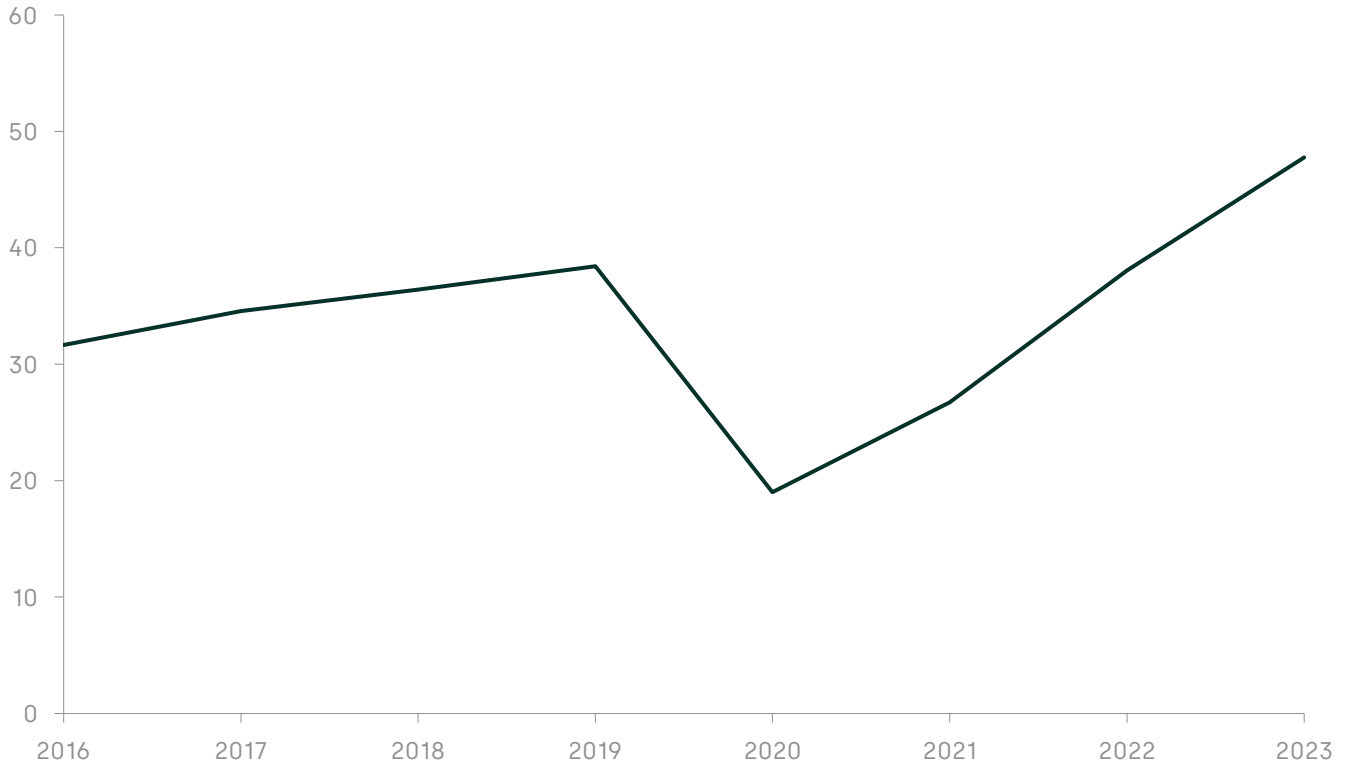
### **4.3.1 Background**

Non-aeronautical revenues at SIA increased steadily and significantly between 2010 and 2019, with a CAGR of 4.5% (see Figure 4.1 below). Despite a reduction in non-aeronautical revenues during the COVID-19 pandemic, they have since rebounded, with a CAGR of 5.6% between 2019 and 2023. As well as growing overall, non-aeronautical revenues at SIA have grown on a per passenger basis.

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<sup>42</sup> While analysis at the time of our draft determination indicated that reducing the sharing rate from 70% to 60% would increase charges by 13%, analysis at the time of the final determination indicates that this effect would be 15%, as a result of other changes.

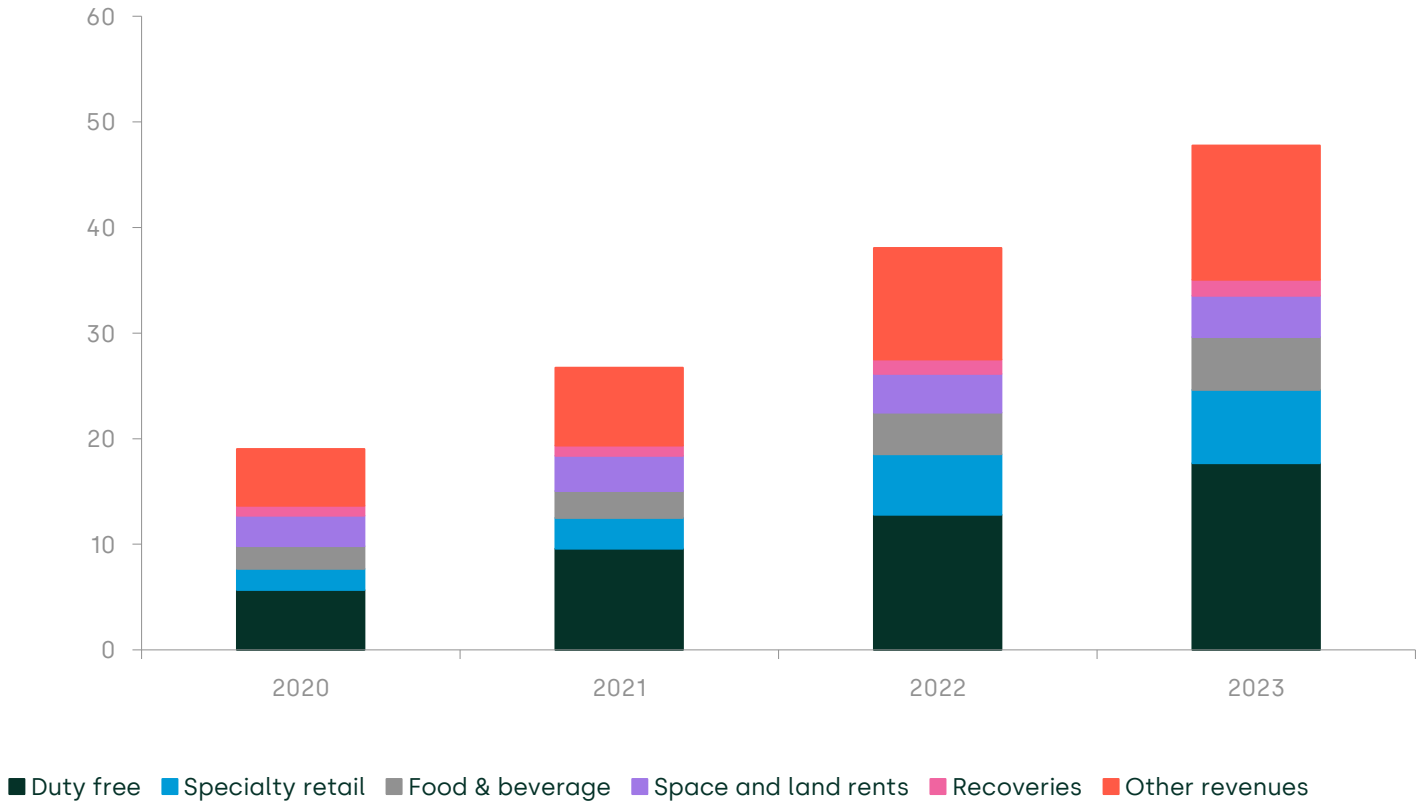
Figure 4.1 Historical non-aeronautical revenue (\$ million)



Note: Revenue data is real (base year 2025).  
Source: Oxera analysis of data in MBJAL QQ3 financial model.

Growth in non-aeronautical revenues has been driven by several categories, including duty-free, specialty retail and other revenues. In 2023, duty-free made up the largest share of non-aeronautical revenues, accounting for 37% of the total, while other revenues made up the second-largest share, accounting for 27%.

Figure 4.2 Non-aeronautical revenues, split by category (\$m, real 2025 terms)



Note: Revenue data is real (base year 2025).  
 Source: JCAA analysis of data in MBJAL QQ3 financial model.

### 4.3.2 MBJAL's commercial revenue proposals

In its initial proposals, MBJAL considered that commercial revenues would continue to grow over QQ3, driven by increases in passenger traffic and inflation. It forecasted that real total non-aeronautical revenues would grow by 3.1% per annum from 2026 to 2030, while passenger numbers would grow by 4.0% per annum over the period.

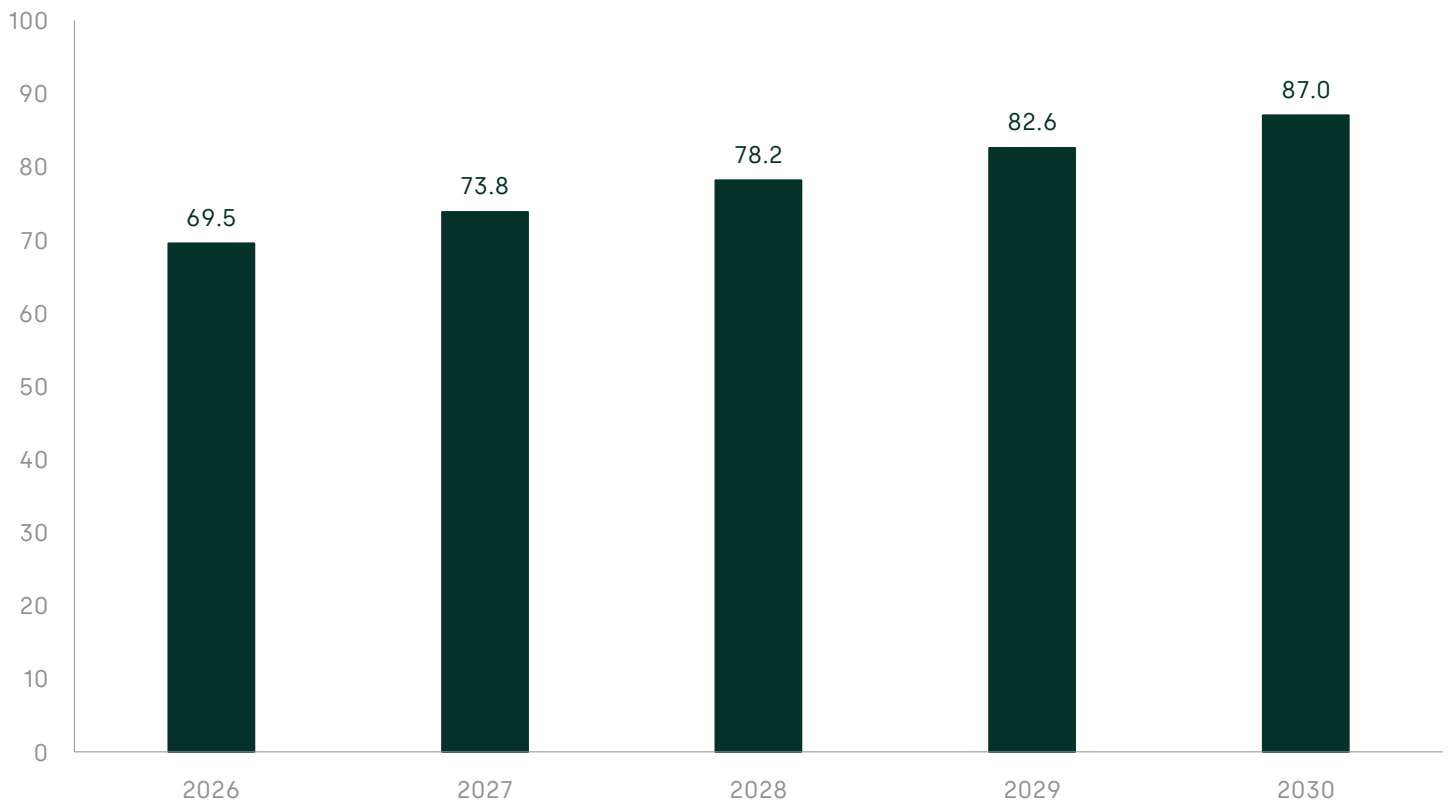
MBJAL noted that commercial revenues have not historically grown exactly in line with passengers. It therefore derived its forecast for commercial revenues based on elasticities of each category of commercial revenue to passenger growth, as follows.

- **Duty-free, specialty retail and food and beverage** were assumed to have an elasticity to passenger numbers of 1, meaning that, for a 1% growth in passengers, these categories of revenue will grow by 1%.

- **Space and land rentals** were forecast to have an elasticity of 0, meaning that there is no relationship to passenger numbers.
- **Other revenues** had an elasticity of 0.8, meaning that, for a 1% growth in passengers, other revenues are expected to grow by 0.8%.
- **Recoveries** had an elasticity of 0.26 to utilities OPEX, meaning that an additional 1% in utilities OPEX leads to a 0.26% increase in recoveries.<sup>43</sup>

MBJAL's commercial revenue forecasts are shown in Figure 4.4.

Figure 4.4 MBJAL's commercial revenue forecasts (US\$m, nominal)



Note: the figure for total commercial revenues includes revenue from MBJAL's three categories of non-regulated aeronautical revenues (refuellers, Common User Terminal Equipment (CUTE) and other non-regulated aeronautical income) in addition to non-aeronautical revenues.

<sup>43</sup> Utilities' recovery refers to the proportion of utilities OPEX that can be recovered through efficiency measures including energy-saving measures and improved understanding of billing.

### 4.3.3 The JCAA's draft determination

In the draft determination, the Authority considered that, in forecasting commercial revenue for QQ3, MBJAL had not presented an analysis of the historical relationship between commercial revenue and passenger numbers, or between commercial revenue and other factors, such as GDP. Although MBJAL stated that it derived commercial revenue elasticities based on historical data, its elasticities were different from the elasticities the Authority obtained from the historic data provided. MBJAL also did not provide any benchmarking of commercial revenue to comparator airports in order to consider the potential for further growth. Therefore, it was not clear how MBJAL had derived the elasticities, and the estimates, for each category of commercial revenue.

The Authority undertook an analysis of historical data to understand how non-aeronautical revenue (categories) have varied with passenger numbers in the past. In doing so, the Authority found that MBJAL's forecast elasticities for 2026–30 for overall non-aeronautical revenue were lower than the outturn elasticities from 2016/17 to 2024. The Authority's position at the time of the draft determination was that there was not any clear reason for this, and because MBJAL had not provided such evidence, it considered the elasticities proposed by MBJAL to be too low.

To determine the appropriate elasticities for the different non-aeronautical revenue categories, in the draft determination, the Authority undertook an analysis of the historical relationship between passenger growth and each category of non-aeronautical revenue, using data from QQ1 and the years of the QQ2 period that were less affected by the COVID-19 pandemic, specifically 2022 and 2023.<sup>44</sup> The Authority did this for the categories of non-aeronautical revenue which were expected to have a relationship with passenger numbers, specifically duty free, food and beverage, specialty retail and other revenues. The Authority did not undertake a similar analysis for space and land rents and recoveries, as it agreed with MBJAL that revenues in these areas are not closely related to passenger numbers. At the same time, it was noted that there was a weak relationship between space and land rents and passenger numbers and

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<sup>44</sup> The Authority has not used data from 2020 and 2021 when estimating commercial revenue elasticities as these years were heavily affected by the COVID-19 pandemic and any elasticities calculated are not likely to apply to other periods. The Authority has also excluded 2024 when estimating commercial revenue elasticities as it did not have access to complete data for this year. Although 2022 was also affected by the COVID-19 pandemic, resulting in high passenger growth, this year has been used when calculating historical elasticities as the Authority finds that elasticities for this specific year are not out of line with those in other relevant years.

therefore an elasticity of 0.1 was proposed, consistent with the approach adopted in QQ2.

The proposed elasticities for each category of non-aeronautical revenue at the time of the draft determination compared to QQ2 elasticities and MBJAL's proposed elasticities for QQ3 are shown in Table 4.1 below.

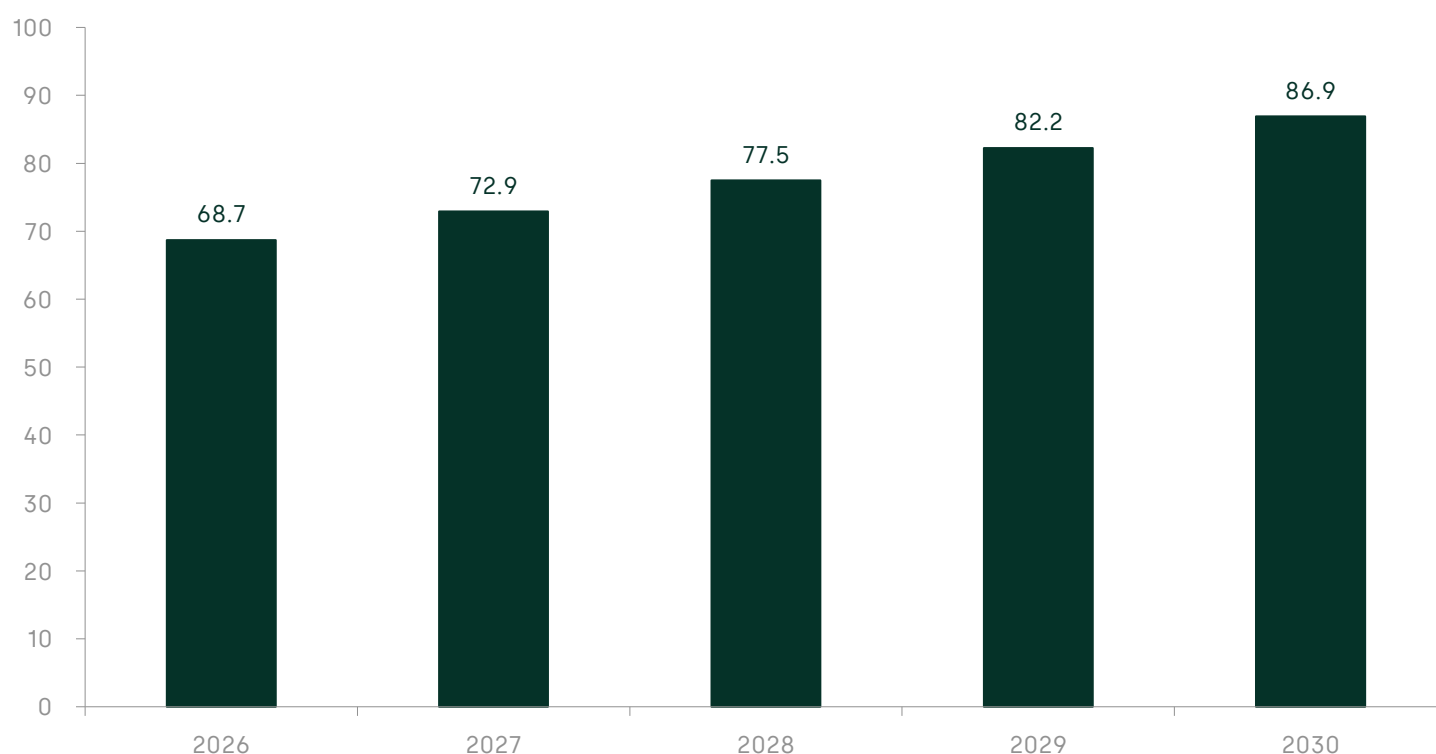
**Table 4.1** The Authority's proposed elasticities for QQ3 compared to MBJAL's proposed elasticities for QQ3 and QQ2 elasticities

	<b>The Authority's proposed elasticity for QQ3</b>	<b>MBJAL's proposed elasticity for QQ3</b>	<b>QQ2 elasticities</b>
<b>Duty-free</b>	1.0	1.0	0.95
<b>Specialty retail</b>	0.9	1.0	0.5
<b>Food and beverage</b>	1.25	1.0	0.9
<b>Space and land rents</b>	0.1	0	0.1
<b>Recoveries</b>	Elasticity of 0.26 to utilities OPEX	Elasticity of 0.26 to utilities OPEX	Elasticity of 0.26 to utilities OPEX
<b>Other revenues</b>	<b>1.5</b>	<b>0.8</b>	<b>1.0</b>

Source: JCAA analysis based on QQ2 final determinations and MBJAL QQ3 financial model.

Using the proposed elasticities, the Authority obtained the following forecasts for QQ3.

Figure 4.3 The Authority's total commercial revenue forecasts based on proposed elasticities - draft determination (US\$m, nominal prices)



Note: The figure for total commercial revenues includes revenue from MBJAL's three categories of non-regulated aeronautical revenues (refuellers, Common User Terminal Equipment (CUTE) and other non-regulated aeronautical income) in addition to non-aeronautical revenues.

Source: JCAA analysis of MBJAL QQ3 financial model.

#### 4.3.4 Responses to the draft determination

In its response to the draft determination, MBJAL raised concerns with the Authority's proposed elasticities for several categories of commercial revenue and provided further context for its estimates.

MBJAL stated that the Authority's proposed elasticity for food and beverage was too high, and that its previously proposed elasticity of 1.0 was more realistic. This elasticity did not appear to be calculated based on past data but instead was based on MBJAL's understanding of the context. MBJAL noted that revenue growth was particularly high between 2019 and 2023, due to upgrades in the service offering and changes to the concession contract during these years, and that in particular high growth in 2019 was unlikely to be repeated in future.

Similarly, MBJAL suggested that high growth in other revenues observed in recent years was unlikely to be repeated in the future, due to several

one-off changes. MBJAL also stated that some components of other revenues are not dependent on passenger numbers and would be expected to have an elasticity of zero. MBJAL provided additional data on historic revenues for each sub-category of other revenues, such as lounge access, car rental and others, together with proposed elasticities for each of these sub-categories. These elasticities did not appear to be calculated based on the historic data provided. MBJAL stated that its previously proposed elasticity of 0.8 for other revenues, which is the weighted average of the proposed elasticities for each sub-category, was more appropriate.

In addition, MBJAL proposed an elasticity of 0 for space and land rentals, as it considered that there is no link to passenger numbers.

MBJAL also corrected an error in its modelling relating to the treatment of recoveries in the calculation of the ACF. Specifically, MBJAL noted that the calculation of the ACF should exclude 95%, rather than 80%, of recoveries.

#### 4.3.5 The JCAA's final determination

Upon consideration of the new evidence submitted by MBJAL, the Authority has reconsidered and revised its commercial revenue elasticities, and forecasts, for several categories of commercial revenue.

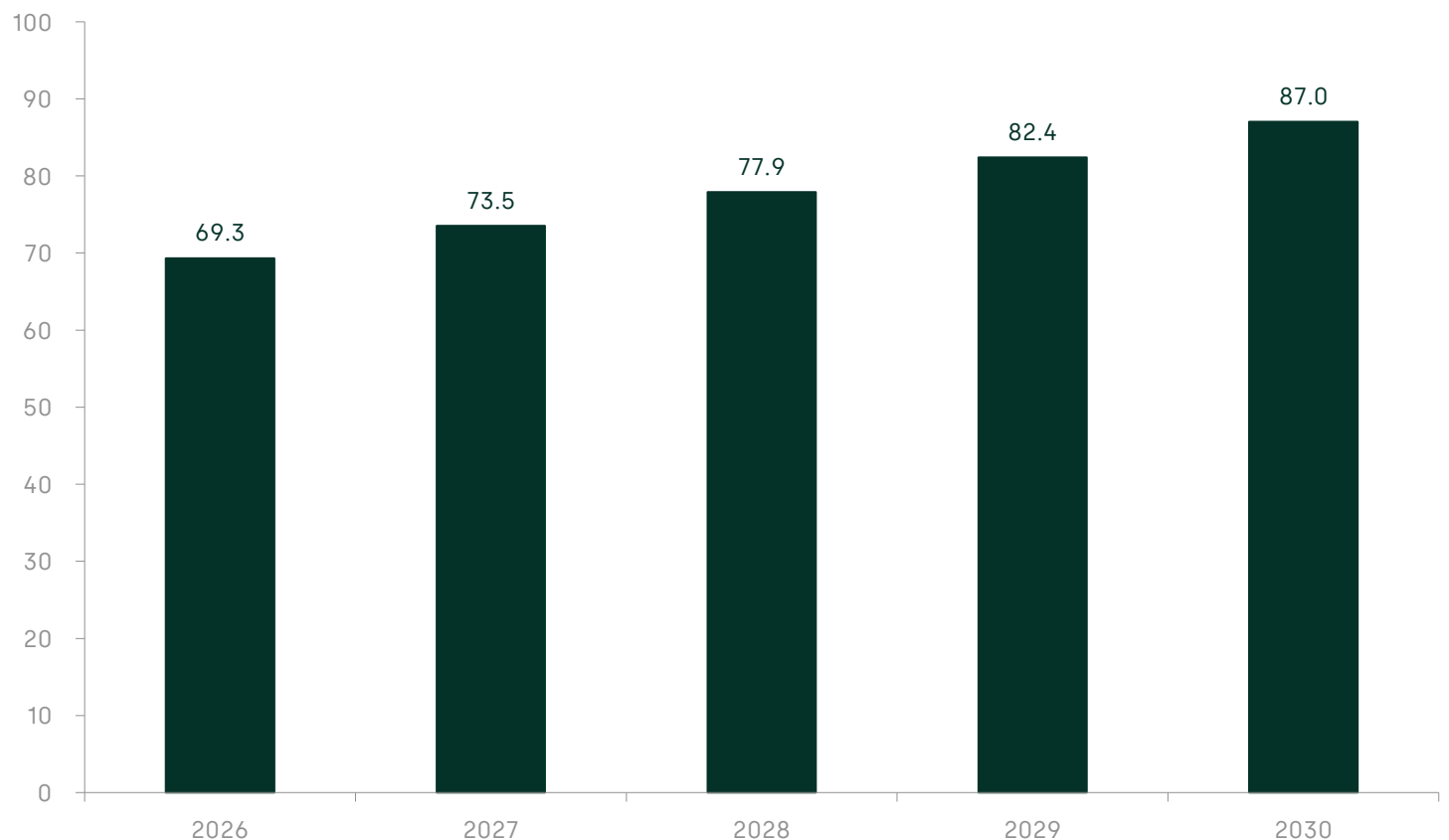
For food and beverage, the Authority notes that recent data has been affected by high revenue growth between 2019 and 2023 due to upgrades in the offering and changes to the concession contract. As a result, the Authority has removed the year 2019, which has a particularly high elasticity, from its calculation of the historic food and beverage elasticity. This results in an elasticity of 0.95.

For other revenues, the Authority notes that high elasticities in recent years have been driven by a range of changes which may not be repeated in future years. The Authority has considered the new data provided by sub-category of other revenue alongside MBJAL's proposed elasticity and rationale. For the sub-categories where MBJAL has provided sufficient reasoning as to why elasticities calculated based on historic data are not representative, the Authority has accepted MBJAL's proposed elasticities. For sub-categories where MBJAL has not provided sufficient reasoning, the Authority has calculated an elasticity based on past data for that sub-category. The Authority has calculated the overall elasticity for other revenues as the weighted average elasticity across each category of other revenue. This results in an elasticity of 0.8, which accords with MBJAL's proposed elasticity.

While the Authority considers that space and land rentals appear to have some correlation with passenger numbers based on historic data, upon further consideration of MBJAL's justification, together with the fact that historic elasticities for this category are particularly volatile, the Authority has accepted MBJAL's proposed approach.

The Authority's final total commercial revenue forecasts are presented in Figure 4.4 below.<sup>45</sup>

Figure 4.4 The Authority's total commercial revenue forecasts based on proposed elasticities (US\$m, nominal prices)



Note: The figure for total commercial revenues includes revenue from MBJAL's three categories of non-regulated aeronautical revenues (refuellers, Common User Terminal Equipment (CUTE) and other non-regulated aeronautical income) in addition to non-aeronautical revenues. The difference from the forecasts in the draft determination is driven by changes to the proposed elasticities, changes to passenger forecasts between

<sup>45</sup> The Authority has made some further adjustments to the inflation assumptions used in the model.

the draft and final determinations and changes to the inflation assumptions as of March 31, 2025. Source: JCAA analysis of MBJAL Q3 financial model.

# 5 Capital expenditure (CAPEX)

## 5.1 Introduction

This section considers the CAPEX for QQ3 to be taken into account in the calculation of the price cap. It first reviews the historical CAPEX at the airport, before setting out the airport's proposals for QQ3, the Authority's draft determination, responses to the draft determination and concludes with the Authority's final determination.

It is worth noting that QQ3 CAPEX will not be fully paid for during the next five years. New CAPEX is added to the RAB each year and the airport earns a return (the WACC multiplied by the RAB) and a depreciation charge. For most assets the depreciation profile will be more than five years, and as such the assets will be remunerated over a longer time period. Issues regarding the RAB, WACC and depreciation are considered in subsequent sections.

## 5.2 CAPEX programme

### 5.2.1 Background

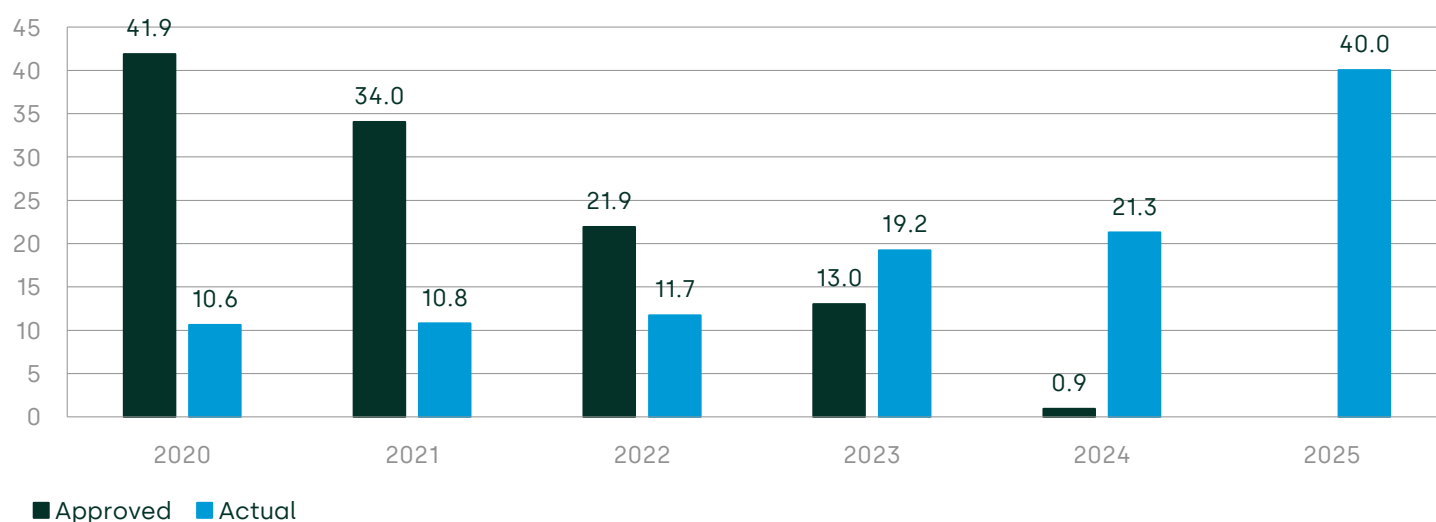
The Authority approved \$111.8m of CAPEX for QQ2 (in nominal terms). However, MBJAL spent significantly less than the approved amount in the first three years of QQ2 (2020–22), due to the COVID-19 pandemic. At the same time, it spent substantially more in the last two years of QQ2 (2023 and 2024) and in 2025.<sup>46</sup>

Figure 5.1 compares MBJAL's actual and approved CAPEX, highlighting the difference between the two. Overall, the overspend on CAPEX across QQ2 was \$1.92m (when excluding outturn CAPEX for 2025, there was an underspend of \$38.12m).

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<sup>46</sup> Although 2025 was not originally part of the QQ2 period, it became part of that period due to the one-year extension until December 31, 2025. Thus, in the context of the QQ2 review, there was no CAPEX approved for 2025.

Figure 5.1 Actual versus approved CAPEX (\$m, nominal)



Notes: The actual CAPEX for 2024 was not available at the time of submission of MBJAL's business plan (October 2024), so this is based on forecasts. 2025 was not originally part of QQ2, thus no CAPEX was approved for that year in the context of the QQ2 review. Source: MBJAL (2024), 'Copy of CAPEX Comparison QQ2 Detailed', November.

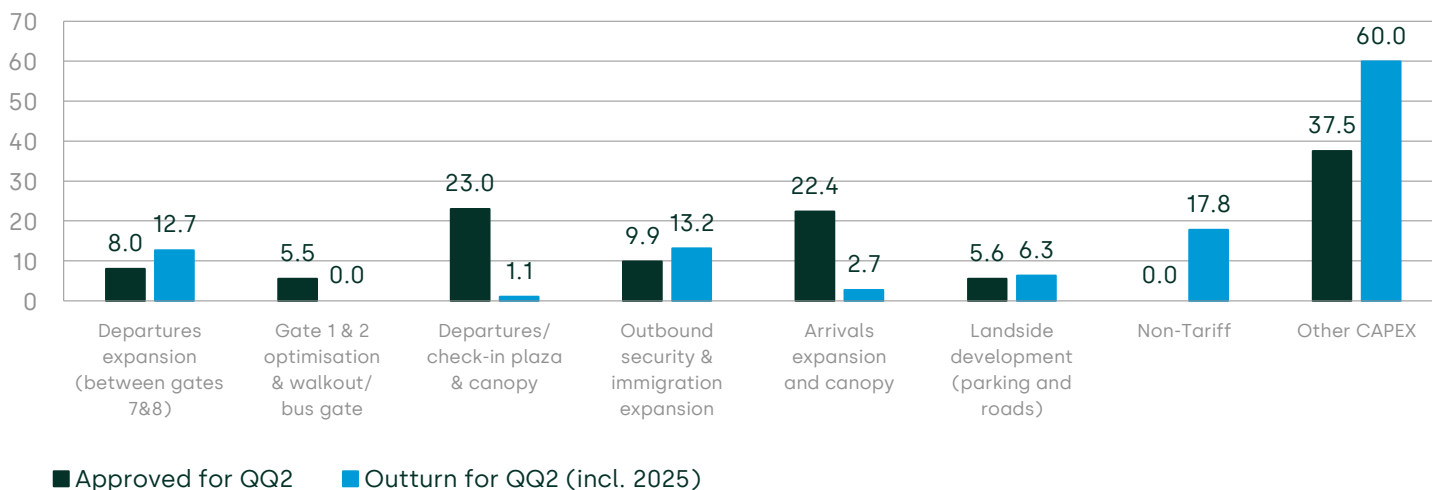
MBJAL has spent more on forecast CAPEX projects than what was approved as part of QQ2, as well as incurring CAPEX on projects that were not approved as part of QQ2. The Authority understands from MBJAL that this is primarily due to COVID-19. According to MBJAL, the pandemic significantly affected its CAPEX programme in the following ways.

- **Deferring, cancelling, and bringing forward projects.** MBJAL notes that it received approval from the AAJ for a deferral of the committed master plan works during the pandemic. However, despite the uncertain times, it continued important projects that were already ongoing, like the Departures Expansion project. In the aftermath of COVID-19, MBJAL started major projects including the immigration and security expansion, the check-in hall expansion, the landside development, the East concourse bus lounge, the Gate 6/7 optimisation and other capital projects.
- **Changing circumstances and user preferences.** MBJAL notes that the biometric passenger processing project became essential during and subsequent to the COVID-19 pandemic in light of changing user preferences and public health considerations. Similarly, according to MBJAL, the solar power supply cost reduction project became more critical post-pandemic.
- **External factors affecting project delivery.** Global supply chain disruptions, labour shortages, and increased material costs resulting from the pandemic and other global macroeconomic

events affected project timelines and budgets, such as in the case of the Departures Expansion project.

The key drivers of the variances in CAPEX spending over QQ2 (including 2025) are shown in Figure 5.2 which compares the approved CAPEX with the outturn CAPEX for each category.<sup>47</sup> The non-tariff investments of \$17.8m (of which \$13.8m was incurred over the 2020–24 period) refer to projects that were not originally approved by the Authority.

Figure 5.2 Outturn versus approved QQ2 CAPEX by category (\$m, nominal)



Notes: For presentational purposes, all projects with an approved amount below \$5 million have been consolidated under the 'Other CAPEX' category.

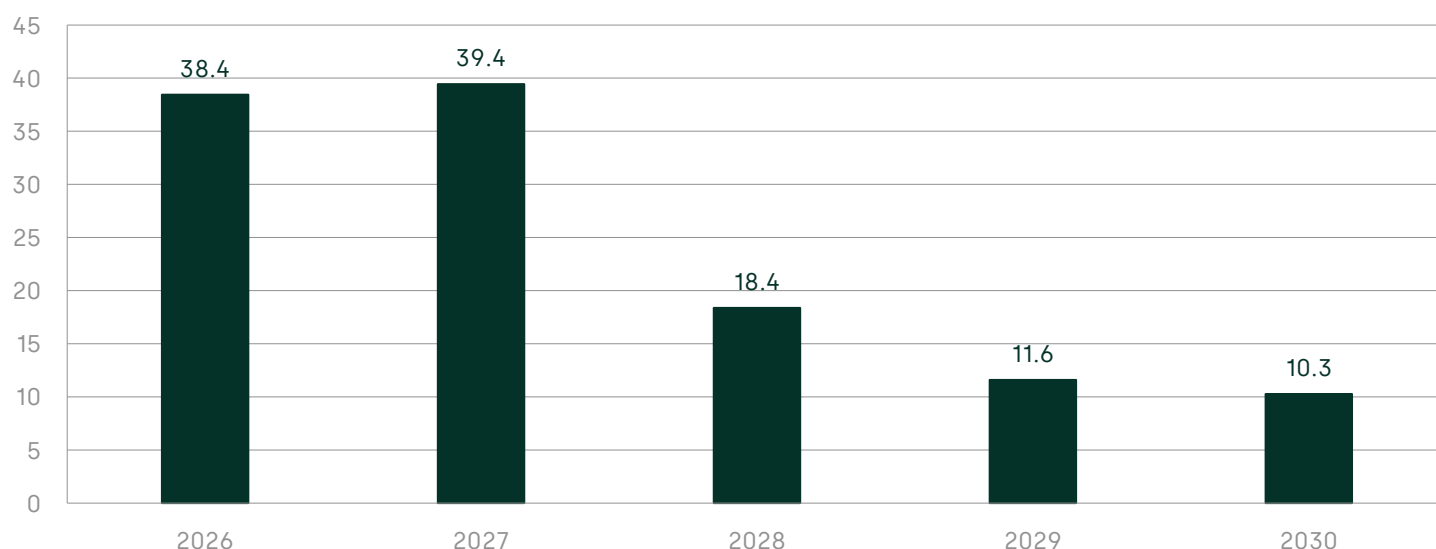
Source: MBJAL (2024), 'Copy of CAPEX Comparison QQ2 Detailed', November.

### 5.2.2 MBJAL's proposals

In its business plan for QQ3, MBJAL presented a forecast CAPEX programme for 2026–30 of **\$118.1m** (in 2025 values). Figure 5.3 below shows the proposed CAPEX profile.

<sup>47</sup> To represent the key drivers of the underspend over QQ2, all the forecast projects under \$5m are grouped under the 'Other CAPEX' category.

Figure 5.3 MBJAL CAPEX programme by year (\$m, 2025 values)



Source: MBJAL (2024), 'Tariff Model QQ3 JCAA – Revision 2', 'CAPEX' tab, December 19.

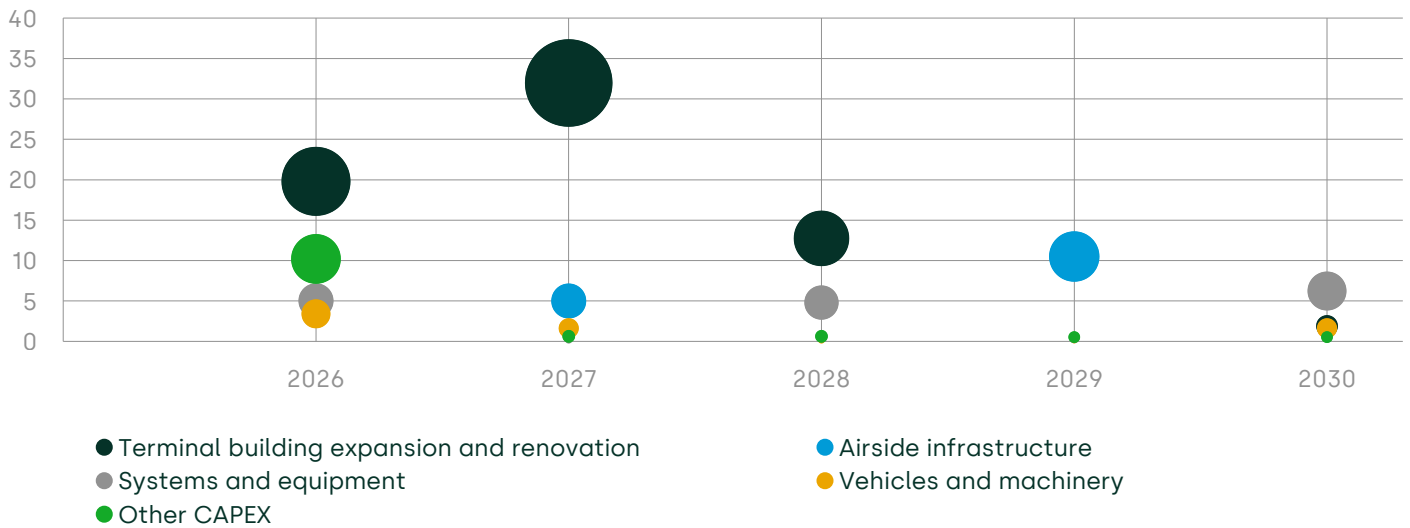
In MBJAL's business plan for QQ3, CAPEX is divided into the following categories.

- **Terminal building expansion and renovation.** This category includes the expansion of the terminal's East concourse, a new departure plaza, an expansion of the arrivals area, the refurbishment of the baggage claim area and custom facilities, and the renovation of the cargo terminal.
- **Airside infrastructure.** This includes the rehabilitation works on the runway and taxiways and the repainting of airside markings.
- **Systems and equipment.** This includes an upgrade of the airport IT systems, the replacement of the security screening equipment, the implementation of new automated screening lanes, and a replacement of the HVAC ducts.
- **Vehicles and machinery.** This includes the acquisition of new fire trucks and the replacement of operational vehicles.

MBJAL provided the CAPEX breakdown across these categories for QQ3. Figure 5.4 sets out the CAPEX breakdown by category, with the size of each circle indicating the scale of the CAPEX programme. It shows that the programme is larger in the earlier years of QQ3 than in the later years.

The principal schemes are the expansion of the terminal's East concourse over the first three years of QQ3 and the overlay of the runway and taxiway pavement in 2027 and 2029.

Figure 5.4 Breakdown of MBJAL CAPEX programme (\$m, 2025 values)



Source: MBJAL (2024), 'Tariff Model QQ3 JCAA – Revision 2', 'CAPEX' tab, December 19.

MBJAL confirmed that no CAPEX forecast for QQ3 will be funded by the Airport Improvement Fee (AIF).<sup>48,49</sup>

The majority of the CAPEX programme forecast for QQ3 (\$72.5m of \$118.1m) is part of the Airport Master Plan.<sup>50</sup> MBJAL also confirmed that 74% of the CAPEX programme represents works required under the Concession Agreement. These comprise the works part of the Airport Master Plan and the works required under Annexure H of the Concession Agreement.<sup>51</sup>

<sup>48</sup> MBJAL (2024), 'Re: Submission of Data concerning QQ3 Business Plan – MBJ Airports Limited', November 26.

<sup>49</sup> The AIF is levied by the Jamaican government on international departing passengers. It is used to pay for assets approved by the Minister of Transport and Mining. The fee will remain in place at SIA until 2030. The Government of Jamaica has full control over capital projects funded by the AIF. The AIF is not included in the RAB and is separate from SIA's CAPEX forecasts.

<sup>50</sup> MBJAL (2024), 'MBJ Airports Limited 3rd Quinquennial Airport Charges Review', Submission to JCAA, October 18, p. 45.

<sup>51</sup> The percentage is derived by adding \$15m related to the airside pavement overlay required by the Concession Agreement under Annexure H to the projects that are part of the Airport Master Plan. See MBJAL (2024), 'Re: Submission of Data concerning QQ3 Business Plan – MBJ Airports Limited', November 26.

#### Considerations on the proposed CAPEX

In the draft determination, the Authority evaluated CAPEX based on two criteria:

- the need for the proposed CAPEX schemes, with regard to the outcomes that they will achieve for users;
- the efficiency of the proposed CAPEX schemes.

With regard to the first criteria, the Authority assessed whether there was broad support expressed during stakeholder meetings. The Authority noted that, during a meeting on October 2, 2024, MBJAL was asked by IATA to provide a more detailed breakdown of the proposed CAPEX schemes, particularly concerning cost, scope, and necessity of the planned investments. While the Authority has not seen this breakdown or any other stakeholder responses to MBJAL's CAPEX programme, it notes that most of the CAPEX outlined in MBJAL's business plan is mandated by the Concession Agreement between AAJ and MBJAL. Consequently, the Authority has limited discretion to exclude any projects required under this agreement.

With regard to the second criteria—the efficiency of the proposed CAPEX schemes—a majority of the CAPEX plan refers to the Airport Master Plan, which was developed by the external consultant INECO. Given this, the Authority did not consider it necessary to further challenge the efficiency of these expenditure items.

Therefore, in the final determination, the Authority decided to allow the CAPEX proposed by MBJAL. However, given that the Authority's traffic forecasts were lower than those of MBJAL (see section 3), the Authority requested information from MBJAL as to whether its planned CAPEX might be affected by the revised traffic forecasts in order to inform the final determination.

#### Treatment of construction work in progress (CWIP)

For the QQ2 review, the Authority allowed CAPEX corresponding to the Airport Master Plan to be added to the RAB as it was incurred. However, for all other CAPEX, expenditure entered the RAB upon completion. In the final determination, it was stated that future determinations would continue to consider CWIP on a case-by-case basis, supported by justification from the airport operator and other stakeholders.

MBJAL submitted an expenditure breakdown by project and year, based on all CAPEX entering the RAB as incurred. In the draft determination, the Authority used this expenditure breakdown to determine when CAPEX should enter the RAB on a case-by-case basis, using the following approach.

Where there was only one year of expenditure incurred, the Authority allowed the CAPEX to enter the RAB as proposed by MBJAL. Similarly, where expenditure for a project spanned multiple years, but the project description suggested that the project consisted of multiple discrete projects, the Authority also allowed the CAPEX to enter the RAB as proposed by MBJAL. This included: (i) 'replacement and upgrade of IS hardware and licensing of software'; (ii) 'replacement and upgrade of airport IT systems'; (iii) 'replacement of furniture'; (iv) 'replacement of motor vehicles' and (v) 'Other CAPEX'.

However, for all CAPEX projects spanning multiple years that did not appear to represent multiple discrete projects, CAPEX entered the RAB in the last year in which expenditure was incurred (i.e. as completed). In other words, for all the residual CAPEX items, the Authority did not allow the CAPEX in the RAB as it was incurred—i.e. CWIP.

This affected the following projects:

- Project 1.1 Building: Departures Plaza & Canopy/Landside Commercial Development. \$4.9m p.a. over 2026–27 adjusted to \$9.7m in 2027.
- Project 1.3 Building: Arrivals Expansion and Canopy. \$8.9m and \$11.2m in 2026 and 2027 respectively, adjusted to \$20.1m in 2027.
- Project 1.4 Building: East Extension. \$3.2m, \$15.9m, and \$12.7m in 2026, 2027, and 2028 respectively, adjusted to \$31.9m in 2028.
- Project 5.3 Leasehold improvement: Replacement of HVAC ducts. \$100k in 2027 and 2028, adjusted to \$200k in 2028;
- Project 6.1 Machinery: Replacement of Air Handling Unit. \$200k in 2026 and 2029, adjusted to \$400k in 2029.
- Project 6.2 Machinery: Fire Truck – New. \$1.5m in 2027 and 2030, adjusted to \$3m in 2030.

- Project 7.2 Runways/Apron: Airside Pavement Overlay (Annexure H). \$5m and \$10m in 2027 and 2029 respectively, adjusted to \$15m in 2029.<sup>52</sup>

The profile of additions to the RAB outlined in the draft determination, in comparison to that proposed by MBJAL, is presented in Table 5.1. The JCAA's approach in the draft determination led to lower CAPEX additions in 2026 and 2027 and greater ones in subsequent years compared to MBJAL. The total CAPEX over QQ3 remained unchanged.

**Table 5.1 Profile of additions to the RAB in the draft determination (\$m, nominal)**

Year	2026	2027	2028	2029	2030	Total
<b>Additions, MBJAL</b>	39.3	41.2	19.6	12.6	11.5	124.2
<b>Additions, JCAA</b>	21.7	31.8	39.8	18.2	13.1	124.6

Note: The mismatch between MBJAL's and JCAA's total additions over QQ3 (in nominal terms) is due to different inflation assumptions.  
Source: JCAA.

#### 5.2.4 Responses to the draft determination

MBJAL responded to the JCAA's draft determination on CAPEX in three areas:

- timing of additions to the RAB for some projects planned for QQ3;
- treatment of CWIP;
- impacts on the CAPEX programme deriving from the revisions to the traffic forecasts.

#### Timing of additions to the RAB for some projects

During the stakeholder consultations, MBJAL clarified that the following investments should be considered as multiple discrete projects. As such, MBJAL argued that the Authority should allow the CAPEX to enter the RAB as proposed by MBJAL.

<sup>52</sup> Figures are expressed in real terms (2025 values). Moreover, given that 2025 is part of the QQ2 period due to the extension of the QQ2 period until December 31, 2025, any CAPEX incurred in 2025 is added to the RAB in the same year.

- Project 5.3 Leasehold improvement: Replacement of HVAC ducts. \$100k in 2027 and 2028, as the replaced ducts will become operational in the same year of purchase.
- Project 6.1 Machinery: Replacement of Air Handling Unit. \$200k in 2026 and 2029, as replaced units will become operational in the year of purchase.
- Project 6.2 Machinery: Fire Truck – New. \$1.5m in 2027 and 2030, as fire trucks will become operational in the year of purchase.
- Project 7.2 Runways/Apron: Airside Pavement Overlay (Annexure H). \$5m and \$10m in 2027 and 2029 respectively, since these represent two separate projects.

### Treatment of CWIP

MBJAL raised concerns regarding the Authority's proposed treatment of CWIP, particularly for major projects scheduled in the early phase of QQ3—namely, the Departures Plaza and Canopy, the Arrivals Expansion and Canopy, and the East Expansion project. Given the scale of these initiatives, MBJAL emphasized that it will face substantial financing costs.

In light of this, MBJAL urged the Authority to reconsider its current approach and revert to the methodology applied during QQ2. Alternatively, MBJAL proposed that the Authority either recognize CAPEX as incurred for these key projects or allow for the recovery of the associated financing costs.

### Impact on CAPEX from revised traffic forecasts

MBJAL also stated that it does not anticipate changes to the Master Plan or CAPEX programme despite revisions to traffic forecasts.

MBJAL justified this position by noting that:

- A significant portion of CAPEX relates to essential works not tied to traffic levels, such as runway and taxiway rehabilitation, IT upgrades, security screening equipment, and improvements to the departures and arrivals areas, including canopies.
- Capacity-related projects like the East Concourse expansion address peak-hour demand rather than annual traffic, which is unlikely to shift meaningfully with minor forecast adjustments. MBJAL added that SIA already experiences peak-time congestion, particularly in departure areas, despite improvements in arrival processing via e-gates.

In addition, the Authority notes that IATA's response to the draft determination raised concerns that information provided by MBJAL did not include the level of cost details per investment required, and did not set out the impact of these investments on potential fee proposals.

#### 5.2.5 The JCAA's final determination

The Authority has examined the three points raised by MBJAL during the consultation process and sets out its final determination below.

##### Timing of additions to the RAB for some projects

The Authority welcomes MBJAL's clarification regarding the discrete nature of certain investments planned for QQ3. Accordingly, the Authority agrees to treat the projects identified by MBJAL as multiple discrete initiatives, and, as such, will allow this CAPEX to be included in the RAB as proposed by MBJAL.

##### Treatment of CWIP

As outlined in the final determination for QQ2, the Authority's approach is to assess CWIP on a case-by-case basis.

On the one hand, the Authority agrees that including CWIP in the RAB could be supported in principle, particularly with reference to regulatory precedents cited by MBJAL. On the other hand, the Authority acknowledges IATA's concerns that such an approach may increase the risk of delayed investments. Ensuring that projects are included in the RAB only upon completion helps safeguard customer interests. Moreover, this approach is consistent with good regulatory practice, such that the assets are not depreciated until they are in use.

In addition, the Authority has reviewed multi-year projects that are included in the RAB upon completion, after incorporating MBJAL's clarifications. Following this review, the Authority notes that there are only three such projects. For these projects the time lag between the year in which the expenditure will be incurred and the year the project will be commissioned ranges from only one to three years.

On balance, the Authority does not consider it appropriate to either include CWIP in the RAB or to recognise the financing costs incurred during the period in which the project remains classified as CWIP.

##### Impact on CAPEX from revised traffic forecasts

The Authority appreciates MBJAL's clarifications regarding the impact of revised traffic forecasts on the CAPEX programme. Accordingly, the Authority does not foresee any changes to the overall CAPEX programme for QQ3.

## Conclusions

Given the revised timing for the inclusion of Projects 5.3, 6.1, 6.2, and 7.2 in the RAB, the Authority presents the updated profile of RAB additions for the final determination in the table below. The Authority notes that, compared to the draft determination, these additions are now expected slightly earlier over the regulatory period. The total CAPEX for QQ3 remains unchanged at \$124.3 million (in nominal terms).<sup>53</sup>

**Table 5.2 Profile of additions to the RAB in the final determination (\$m, nominal)**

Year	2026	2027	2028	2029	2030	Total
<b>Additions, MBJAL</b>	39.3	41.2	19.6	12.6	11.5	124.2
<b>Additions, JCAA</b>	21.9	38.7	39.6	12.7	11.5	124.3

Note: The mismatch between MBJAL's and JCAA's total additions over QQ3 (in nominal terms) is due to different inflation assumptions.

Source: JCAA.

Finally, the Authority acknowledges IATA's concerns around insufficient information provided to stakeholders on the airport's investment plans. The Authority will require more evidence in QQ4 that stakeholders have been appropriately consulted on the CAPEX programme and that their views have informed the QQ4 business plans, as set out in section 2.4.

## 5.3 Additional capital expenditure mechanism

### 5.3.1 Background

The previous section set out MBJAL's CAPEX forecasts for QQ3. However, actual CAPEX may deviate from forecasts for a number of reasons.

<sup>53</sup> The JCAA's additions to the RAB for the final determination reflect updated inflation forecasts as of March 31, 2025.

- Changing circumstances or user preferences render a previously agreed capital project uneconomical, or indicate that additional investment is required.
- The airport underspends due to deferring/cancelling agreed capital projects, or overspends due to bringing forward projects/undertaking additional investment that was not agreed in advance.
- The airport underspends or overspends while delivering the agreed programme as a result of external factors.

With respect to under- or overspends due to changes in projects or spending less/more on agreed programmes, the Authority considers that these would be addressed at the end of the QQ3 period through a 'logging-up' or 'logging-down' procedure. For example, if an airport needs to spend more on a particular capital investment than initially allowed for by the regulator, and this additional expenditure is efficient, the regulator may allow (a portion of) this CAPEX in the RAB at the next rate review, by increasing the opening RAB for the following period. This would only be considered in advance of setting prices for QQ4 and not during the QQ3 period.

However, the Authority notes that there may be new projects that arise over the course of the rate review period that would be in the interests of users, but which could not be forecast in advance of QQ3, or projects where the timing needs to be brought forward due to higher levels of demand.

In the QQ2 rate review, the Authority introduced an additional capital expenditure (ACE) mechanism through which it would be able to approve CAPEX during the rate review subject to following a pre-specified and published methodology. Any additional CAPEX approved would lead to an adjustment of the charges cap within the period. The ACE mechanism would depend on the airport consulting with airlines on any proposed new CAPEX and for the airports and airlines to agree on (i) the need for the project; and (ii) the price adjustment required to reflect the additional CAPEX requirement. The airport would then bring forward its proposals to the Authority with supporting evidence in order for the Authority to decide on whether to accept or modify the proposal.

This mechanism was not warranted during QQ2.

### 5.3.2 MBJAL's proposals

In its business plan, MBJAL proposed the following amendments to the ACE mechanism.<sup>54</sup>

- 1 Include not only new, unanticipated CAPEX but also (i) any acceleration of CAPEX already agreed, and (ii) any postponement of agreed CAPEX.
- 2 If the Authority approves the investment while deferring the associated changes in yield to the following regulatory period, the Authority will recognise interim financing costs.

### 5.3.3 The JCAA's draft determination

In the draft determination, the Authority proposed to retain the ACE mechanism for QQ3 and implement it if needed in the upcoming regulatory period. The mechanism would function as follows:

- Airports would consult airlines on any proposed new CAPEX projects through an airport CAPEX consultative committee (including all airlines with more than 100,000 passengers in the preceding 12 months).
- The aim would be for the airport and airlines to agree on: (i) the need for the project; and (ii) the price adjustment required to reflect the additional CAPEX requirement.
- Following consultation, the airport operator would bring forward its proposals and supporting evidence (including additional CAPEX and OPEX requirements, traffic forecasts, and information on the consultation process) to the Authority.
- Projects for which airlines agree on the need and the proposed price adjustment would typically be expected to receive regulatory approval with minimal scrutiny.
- Where there is agreement on the need for the project but not the price adjustment, the Authority would review and decide whether to accept the airport operator's proposal or modify it. If the project scope and price proposal are accepted, the airport would be expected to proceed on the proposed terms. If the regulator made significant modifications to the project or price adjustment, the airport could decide not to proceed (and there would be no change to the revenue yield cap).
- Finally, if airlines oppose the project or no consensus is reached, but the airport believes that the project would be in the public interest, the Authority would review whether there was sufficient

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<sup>54</sup> MBJAL (2024), 'MBJ Airports Limited 3rd Quinquennial Airport Charges Review', Submission to JCAA, October 18, p. 17.

justification for the investment and the appropriate price adjustment. As above, in the event of substantial modification to the airport's initial proposal, the airport could decide not to proceed with the project.

With respect to the amendments to the ACE mechanism proposed by MBJAL, the Authority noted that the two additional circumstances mentioned by MBJAL (acceleration and postponement of agreed CAPEX) are already addressed through the logging-up or -down procedure at the end of the regulatory period. Thus, the Authority did not believe that it was appropriate to amend the current ACE mechanism for these two circumstances.

With respect to MBJAL's second point, the Authority will amend the approach proposed in QQ2 such that any approved CAPEX is recognised within the period.

Finally, in the draft determination, the Authority considered whether to establish a minimum threshold below which airports would not be required to consult users. Based on analysis of the CAPEX plan by project size, the Authority set this minimum threshold at \$500,000.<sup>55</sup> This strikes a balance between minimising project delivery delays and excessive administrative burdens for airports, and ensuring that users are consulted for significant changes to the CAPEX plan.

#### 5.3.4 Responses to the draft determination

In response to the Authority's draft determination, MBJAL stated that it considers the \$500,000 minimum threshold set by the Authority to be too low. According to MBJAL, this threshold represents only 2.0% of the average annual CAPEX over the 2026-30 period and therefore the 'potential for relatively small CAPEX changes to trigger the process is quite high' and has the potential to hold up critical expenditures.<sup>56</sup> MBJAL has proposed a higher threshold of \$1 million or \$2 million.

MBJAL has also raised concerns that the process could lead to undue burden every time there is a change to the CAPEX programme.

In their response to the draft determination, IATA and the airlines emphasized the need for effective supervision of the ACE mechanism's implementation, particularly regarding the minimum threshold of

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<sup>55</sup> This value corresponds approximately to the 20th percentile. In other words, 20% of the projects submitted in the CAPEX programme are smaller than \$500,000.

<sup>56</sup> MBJAL (2025), 'Response to the JCAA draft determination of the 3rd of March 2025', April, pp.21-22.

\$500,000. They argued that strong oversight is essential to prevent airports from strategically dividing projects into smaller projects to circumvent user consultation requirements.

### 5.3.5 The JCAA's final determination

The purpose of the ACE mechanism is to allow airport operators to propose new unforeseen projects which could not be forecast in advance of QQ3, or projects where the timing needs to be brought forward due to higher levels of demand. It is not intended to address every change in the CAPEX programme—many of which would be better addressed through the logging-up or logging-down process described above. Therefore, the Authority's aim in introducing a threshold below which projects would not require user consultation is to enhance the flexibility of the ACE mechanism.

The Authority maintains the \$500,000 threshold set out in the draft determination. This level was established based on an analysis of MBJAL's CAPEX plan for QQ3, which showed that approximately 20% of planned projects are below \$500,000. The rationale is to provide MBJAL the flexibility it needs to address small, critical expenditures including, as noted by MBJAL, 'in response to weather damage, new security or safety requirements'.<sup>57</sup> It remains the Authority's position that unforeseen projects above \$500,000 are significant and warrant consultation with the airport's users if they are to be subject to the ACE mechanism.

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<sup>57</sup> MBJAL (2025), 'Response to the JCAA draft determination of the 3rd of March 2025', April, p. 21.

## 6 Regulated asset base and depreciation

### 6.1 Setting the regulated asset base

#### 6.1.1 Background

The opening RAB for 2026 informs the charges for the next regulatory period. Several approaches can be used to set the RAB, but the Authority's first reference is the RAB values available in the airport's regulatory accounts, to the extent that the principles and approaches used to set these are consistent with regulatory best practice.

#### 6.1.2 MBJAL's proposals

MBJAL proposed an opening RAB for QQ3 of \$188.2m.<sup>58</sup> The RAB consists of the net book value of assets, which is assets at cost less depreciation, plus capital investment minus depreciation for each year.

The value of the opening RAB for QQ3 is derived from the opening RAB for QQ2, of \$173.0m, and accounting for the CAPEX and depreciation incurred over the QQ2 period (including 2025). As explained by MBJAL, the opening RAB of \$188.2m 'includes both overspend on QQ2 approved capital investments as well as additional spend on capital projects not already approved by the Authority, but vital for the airport's operation and future competitiveness'.<sup>59</sup> MBJAL's CAPEX programme over QQ2 has been affected by the COVID-19 pandemic in three ways: (i) the high level of uncertainty resulted in significant under- or overspend; (ii) changing circumstances or user preferences affected the need for some projects; (iii) supply chain bottlenecks affected project delivery.

In line with the final determination for QQ2, MBJAL has used a non-inflation-adjusted (historical) RAB and a nominal cost of capital (see section 7).

#### 6.1.3 The JCAA's draft determination

In the draft determination, the Authority made one adjustment to MBJAL's proposed opening RAB for QQ3. As noted in section 5.2, over the 2020–24 period MBJAL spent \$13.8m on projects not originally approved by the Authority. Therefore, in line with the approach from QQ2, this amount was excluded from the opening RAB for 2026, while it was included in the

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<sup>58</sup> On November 26, 2024, MBJAL revised the value of the opening RAB for QQ3 compared to the value submitted in its business plan (\$173.0m) to reflect an addition 'to 2025 CAPEX of \$1.2M as carryover on Gate 6&7 Optimization project currently in progress which was inadvertently left off of the 2025 additions previously submitted'. See MBJAL (2024), 'Re: Submission of Data concerning QQ3 Business Plan – MBJ Airports Limited', November 26.

<sup>59</sup> MBJAL (2024), 'MBJ Airports Limited 3rd Quinquennial Airport Charges Review', Submission to JCAA, October 18, p. 46.

closing RAB for the same year.<sup>60</sup> Other than this adjustment, the Authority used MBJAL's proposed opening RAB for QQ3 in setting its determination.

#### 6.1.4 Responses to the draft determination

MBJAL requested further clarification on why the unapproved overspend is scheduled to be added to the RAB at the end of 2026, rather than at the start of QQ3. Other stakeholders raised concerns with the Authority's inclusion of unapproved CAPEX in the RAB, stating that they believed there need to be controls to ensure compliance with the investment plan.

#### 6.1.5 The JCAA's final determination

The Authority maintains the adjustment to the opening RAB as proposed in the draft determination. The exclusion of this CAPEX from the opening RAB for 2026—and its inclusion in the closing RAB for the same year—reflects the fact that the expenditure was not originally approved by the JCAA. This approach is consistent with the approach taken in QQ2.

The Authority considers that the inclusion of previously unapproved CAPEX in the RAB is appropriate given the unique circumstances of the COVID-19 pandemic. Unapproved CAPEX in future regulatory reviews will be scrutinised and similarly considered in the context of the regulatory period.

## 6.2 Depreciation

### 6.2.1 Background

The depreciation of CAPEX is one of the building blocks of allowed revenue, along with OPEX and a target return on assets. A key principle with respect to depreciation is that assets should be depreciated to the end of their useful economic lives. This is in line with regulatory practice at airports (and in other sectors) internationally. However, in QQ3 (as with QQ2) MBJAL proposed that assets be depreciated to the end of the concession period. This is because, according to MBJAL, this approach would ensure consistency with the QQ2 approach and because there is no mechanism in the Concession Agreement for investors to recover undepreciated assets at the end of the concession.<sup>61</sup>

However, the Authority notes that depreciating CAPEX to the end of the concession period could lead to customers under- or overpaying for certain assets:

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<sup>60</sup> CAPEX spent on unapproved projects in 2025 (equal to c.\$4m) is not part of this adjustment.

<sup>61</sup> MBJAL (2024), 'MBJ Airports Limited 3rd Quinquennial Airport Charges Review', Submission to JCAA, October 18, p. 17.

- short-lived assets would be remunerated over the entire concession period. As a result, passengers in the earlier part of the period would underpay for these assets, while those towards the end of the period would be contributing towards an asset no longer in use;
- long-lived assets built towards the end of the concession period would be fully remunerated before the end of the asset's useful economic life. This would result in passengers during the concession period overpaying for the asset, while those after the end of the concession period would benefit from an asset without having contributed for it.

In QQ2, the Authority's position was that all new CAPEX should be depreciated to the end of its useful economic life rather than to the end of the concession period. A straight-line depreciation profile was applied for all assets. However, in line with instructions from the government, both existing and new assets were ultimately depreciated in line with the duration of the Concession Agreement.

During the QQ3 rate review process, the AAJ confirmed that there is a clause for undepreciated assets to be recouped at the end of the concession period. Specifically, Schedule 10 of the Concession Agreement states that the airport operator should be compensated for any projected 'Residual Capital Investment Sum for Development Programme Works which are substantially completed in accordance with this Concession Agreement prior to the Termination Date'.

The AAJ has explained that this recoupment clause applies both when the concession period is terminated early and when it expires. The AAJ has confirmed that the Development Programme Works refer to CAPEX that is in the airport's Master Plan as well as any other CAPEX that:

- has been approved by the AAJ;
- meets minimum service levels and regulatory criteria; and
- is required or intended to implement the development programme.<sup>62</sup>

In addition, the approval process to qualify as Development Programme Works, and therefore be subject to the recoupment clause, requires that

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<sup>62</sup> AAJ (2024), 'Email: Responses to JCAA's queries dated November 15, 2024', November 22.

the CAPEX has received approval from the JCAA, and that it has been included in the RAB.<sup>63</sup>

### 6.2.2 MBJAL's proposals

In its business plan, MBJAL proposed that assets be depreciated to the shorter of (i) the remaining life of the concession period, or (ii) the useful life of the assets.<sup>64</sup> MBJAL's proposals for depreciation of different assets are set out in Table 6.1.

Table 6.1 Useful life of assets proposed by MBJAL

Asset type	Useful life
Building and Leasehold	Remaining life of Concession Agreement
Machinery and Equipment	5–15 years
Motor vehicles and fuel hydrants	5–20 years
Furniture and fixtures	10 years
Computers	4 years

Source: MBJAL (2024), 'MBJ Airports Limited 3rd Quinquennial Airport Charges Review', Submission to JCAA, October 18, p. 48.

Despite the table above, which is set out in its business plan, in the tariff model submitted to the Authority, MBJAL depreciated all of its assets to the end of the concession period.<sup>65</sup>

MBJAL explained that since there are only eight years remaining in its Concession Agreement, the alternative approach of depreciating assets to the end of their useful economic life, though in line with international precedent, creates risk for investors if there is no mechanism to recoup undepreciated CAPEX. MBJAL proposed that a straight-line depreciation profile be applied.

### 6.2.3 The JCAA's draft determination

In the draft determination, the Authority considered that CAPEX should be depreciated to the end of its useful economic life, using a straight-line

<sup>63</sup> AAJ (2024), 'Email: Responses to JCAA's queries dated November 15, 2024', November 22.

<sup>64</sup> MBJAL (2024), 'MBJ Airports Limited 3rd Quinquennial Airport Charges Review', Submission to JCAA, October 18, p. 48.

<sup>65</sup> MBJAL (2024), 'Tariff Model QQ3 JCAA – Revision 2', 'AMORT' tab, December 19.

depreciation profile. This approach is consistent with regulatory precedent, most stakeholders responses, economic theory, and the Authority's position in QQ2. The alternative approach of depreciating assets to the end of the concession period could lead to customers under- or overpaying for certain assets.

Schedule 10 of the Concession Agreement, which allows for investment in undepreciated assets to be recouped at the end of the concession period, limits the risk to MBJAL of not being able to recover CAPEX included in the Development Programme Works. The AAJ has confirmed that this clause refers to any works that are approved by the AAJ and intended to enhance, develop and expand the airport. This includes any CAPEX that is in the airport's Master Plan, and it may also include CAPEX that is not in the Master Plan provided it is approved by the AAJ and deemed necessary for the development of the airport.

In the draft determination, the Authority noted that most of the Airport Master plan projects are expected to be completed and enter the RAB by the end of the QQ3 in 2030. Therefore, these should be subject to the recoupment clause. However, if some of these projects overrun and are not completed before the end of the concession period in March 2034, there is a risk of CAPEX not entering the RAB and therefore not being subject to the recoupment clause as projects are allowed into the RAB only once they have been completed. In the draft determination, the Authority noted that, should such a scenario arise, it will consider whether to allow CAPEX for these projects into the RAB as incurred in the QQ4 review.

In addition to the CAPEX confirmed for inclusion in the Development Programme Works (which aligns with the projects outlined in the Airport Master Plan), the Authority also considered the 'Airside Pavement Overlay' to fall under the recoupment clause, as it is mandated by Annexure H of the Concession Agreement. The inclusion of projects that are not in the airport's Master Plan, in the Development Programme Works, was subject to confirmation by the AAJ at the time of the draft determination.

To summarise, in the draft determination, the Authority proposed to depreciate the assets subject to the recoupment clause on the basis of their useful lives. Conversely, the Authority proposed to depreciate assets not covered by this clause to the end of the concession period.

The Authority asked MBJAL for the relevant asset lives for the 'Building', 'Leasehold improvement', and 'Runways/Apron' asset categories. As MBJAL had not provided this information, the Authority proposed to

depreciate these assets over 30 years, in line with the final determination for QQ2.

The Authority's proposed depreciation policy for the draft determination is summarised in Table 6.2.

Table 6.2 JCAA's depreciation policy in the draft determination

Asset category	Useful life
Assets <b>not</b> under the recoupment clause	Remaining life of Concession Agreement
Assets under the recoupment clause (Building)	30 years
Assets under the recoupment clause (Leasehold improvement)	30 years
Assets under the recoupment clause (Runways/Apron)	30 years

Note: The table shows the useful lives exclusively for assets covered by the recoupment clause (Building, Leasehold improvement, and Runways/Apron), as all other assets will be depreciated up until the end of the Concession Agreement.

Source: JCAA.

#### 6.2.4 Responses to the draft determination

In its response to the draft determination, MBJAL stated that it appreciates that the Authority is depreciating assets that are not subject to the recoupment clause to the end of the concession period. However, it notes that: 'there remains considerable risk to MBJAL as currently there is no formal, written agreement with the AAJ regarding the undepreciated amounts and some aspects of the QQ3 CAPEX program have not been formally confirmed by the AAJ to be part of the Development Programme Works.'<sup>66</sup>

In addition, MBJAL raised concerns about the Authority's proposed use of a 30-year useful life assumption for all assets under the recoupment clause. It instead recommended 20-years for taxiways and aprons, which it considers to be more consistent with industry practice. MBJAL referenced the ICAO Airport Economics Manual, which notes that depreciation periods for runways and taxiways typically range from 15 to

<sup>66</sup> MBJAL (2025), 'Response to the JCAA draft determination of the 3rd of March 2025', April, p.22.

30 years,<sup>67</sup> and the US Federal Aviation Administration (FAA), which recommends a standard pavement design life of 20 years.<sup>68</sup>

IATA has stated that it agrees with the Authority's position to depreciate assets to the end of their useful economic lives.

The AAJ's formal response to the draft determination highlighted concerns with the Authority's approach to depreciating CAPEX not included in the Airport Master Plan to the end of the Concession Agreement. The AAJ has stated that in the event that the concession runs its full term, assets are transferrable in the following manner:

- Motor vehicles, machinery and equipment, and office equipment are transferrable at Net Book Value;
- Development Programme Works are transferrable at the Residual Capital Investment Sum;
- All other retransferred assets shall be valued at J\$1 (in aggregate).

Moreover, the AAJ has clarified that the following non-Master Plan CAPEX should be excluded from the Development Programme Works:

- Screening Lanes (Security Checkpoints): \$1m;
- Fire Truck – New: \$3m;
- Replacement of X-Ray Machines (Security Checkpoints): \$6m.

In its response to the JCAA's request for clarification dated May 1, 2025,<sup>69</sup> the AAJ confirmed the following.

- The **three CAPEX items mentioned above**—'Screening Lanes (Security Checkpoints)', 'Fire Truck – New', and 'Replacement of X-Ray Machines (Security Checkpoints)'—are not classified as Development Programme Works, as they fall within the scope of Clause 9.4 (statutory compliance) and/or Clause 17 (maintenance of Tangible Concession Assets). As such, they are not eligible for cost recovery under the recoupment clause, and the Concession Agreement does not provide for their depreciation to the end of the Concession Period. However, the AAJ acknowledges that the JCAA, under its regulatory powers, may

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<sup>67</sup> ICAO (2020), Airport Economics Manual, 4th Edition, pp. 4-17.

<sup>68</sup> US FAA (2021), Advisory Circular, available at:

[https://www.faa.gov/documentLibrary/media/Advisory\\_Circular/150-5320-6G-Pavement-Design.pdf](https://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5320-6G-Pavement-Design.pdf) (accessed 17 April 2025).

<sup>69</sup> AAJ (2025), 'RE: Q&E Tariff Review – Sangster International Airport', May 1.

determine whether these costs could be recovered through user charges via depreciation over the Concession Period.

- For **movable assets**, comprising motor vehicles, machinery and equipment, and office equipment (e.g. computers, furniture), the AAJ has clarified that these are to be retransferred at their net book value at the end of the Concession Period. Accordingly, these assets should be depreciated over their economic useful lives, in accordance with the Concession Agreement.
- With respect to **leasehold improvements and ageing infrastructure** (including the airside pavement overlay referenced in Annexure H), the AAJ clarified that such assets do not automatically qualify as Development Programme Works. Under Clause 17 of the Concession Agreement, MBJAL has an obligation to maintain, repair, renew, and replace all Tangible Concession Assets at its own cost. Therefore, unless expressly approved as Development Programme Works, these assets are to be transferred to the AAJ at J\$1 at the end of Concession Period.

Lastly, the JCAA notes that the AAJ's letter includes MBJAL's legal assessment, which sets out a different interpretation for the following CAPEX items.

- **CUTE System replacement.** Although it falls under the 'Computers' category—which the AAJ confirms to be transferrable at net book value at the end of the Concession Period and is therefore subject to the recoupment clause—MBJAL argues that it is not reimbursable and should be transferred at J\$1 at the end of Concession Agreement instead.
- **Replacement of X-Ray Machines (Outbound) – CT.** While classified under the 'Machinery' category—which the AAJ confirmed to be subject to the recoupment clause—MBJAL maintains that it should be transferred at J\$1 at the end of Concession Agreement instead.

### 6.2.5 The JCAA's final determination

The Authority's position is to maintain the approach set out in the draft determination with respect to depreciating assets subject to the recoupment clause to the end of their useful economic lives, and depreciate the remaining assets to the end of the Concession Agreement. We believe this protects users from paying for assets which they will not use, while allowing airport investors to ensure they will be able to recoup their investments.

In response to MBJAL's concerns that there is no formal written agreement setting out which assets are eligible for recoupment, the Authority notes that the AAJ has clarified which assets are subject to the recoupment clause according to the Concession Agreement.

To summarise, Table 6.3 shows the CAPEX projects subject and not subject to the recoupment clause. The table takes account of the clarifications provided by the AAJ, as well as the legal assessment by MBJAL attached to the AAJ's letter, particularly where it proposes a different approach from that of the AAJ.<sup>70</sup>

**Table 6.3 CAPEX projects subject and not subject to the recoupment clause**

<b>Project name</b>	<b>Asset category</b>	<b>Capital planning category</b>	<b>Subject to the recoupment clause</b>
Departures Plaza & Canopy/Landside Commercial Development	Building	Airport Master Plan	Yes
Baggage Make-up Expansion	Building	Airport Master Plan	Yes
Arrivals Expansion and Canopy	Building	Airport Master Plan	Yes
East Extension	Building	Airport Master Plan	Yes
Expansion & Renovation Designs	Building	Airport Master Plan	Yes
Cargo Terminal	Building	Airport Master Plan	Yes
Immigration Expansion/Outbound Security Expansion	Building	Airport Master Plan	Yes
East Concourse Expansion	Building	Airport Master Plan	Yes
Project Management Master Plan Projects	Building	Airport Master Plan	Yes
Master Plan - Technical Support (Engineering Design)	Building	Airport Master Plan	Yes
Check-In Hall Expansion	Building	Airport Master Plan	Yes
Gate 1 to 5 Renovation	Building	Airport Master Plan	Yes
Gate 6 & 7 Optimization	Building	Airport Master Plan	Yes

<sup>70</sup> However, with respect to the 'CUTE System replacement', given its economic useful life of four years, depreciation over this period would result in a residual value of zero at the end of the Concession Period. Accordingly, the Authority considers this CAPEX item to fall within the scope of the recoupment clause.

<b>Project name</b>	<b>Asset category</b>	<b>Capital planning category</b>	<b>Subject to the recoupment clause</b>
Landside Development (Western Airport Entrance, Parking and Roads)	Leasehold Improvement	Airport Master Plan	Yes
Public Car Park Expansion	Leasehold Improvement	Airport Master Plan	Yes
Inbound Carousel Replacement	Machinery	Airport Master Plan	Yes
Baggage Claim and Customs Building Rehabilitation		Aging Infrastructure	No
Firehall Expansion - Dormitory, Office and Storage	Building	Operational Efficiency	No
Screening Lanes (Security Checkpoints)	Building	Regulatory Compliance/Airport Safety/Security	No
Replacement and Upgrade of IS Hardware and Licensing of Software	Computer	IT Improvements	Yes
Replacement and Upgrade of Airport IT Systems	Computer	IT Improvements	Yes
CUTE System Replacement	Computer	IT Improvements	Yes
Intrusion Detection System	Computer	IT Improvements	Yes
Biometric Passenger Processing (E-Gates, Self-Bag Drop, Biometric Boarding)	Computer	IT Improvements	Yes
Replace furniture throughout the company	Furniture	Operational Efficiency	Yes
Jetbridges	Jetbridges	Aging Infrastructure	No
Solar Power Plant	Leasehold Improvement	Operational Efficiency	No
Replacement of HVAC ducts	Leasehold Improvement	Aging Infrastructure	No
Replacement Air Handling Unit	Machinery	Aging Infrastructure	No
Fire Truck - New	Machinery	Regulatory Compliance/Airport Safety/Security	No
Replacement of X-Ray Machines (Security Checkpoints)	Machinery	Regulatory Compliance/Airport Safety/Security	No
Replacement of X-Ray Machines (Outbound) - CT	Machinery	Regulatory Compliance/Airport Safety/Security	No
Incinerator	Machinery	Aging Infrastructure	No
High Voltage Switch Gear	Machinery	Aging Infrastructure	No

Project name	Asset category	Capital planning category	Subject to the recoupment clause
Apron & Taxiway Markings Restriping	Runways/Apron	Aging Infrastructure	No
Airside Pavement Overlay (Annexure H)	Runways/Apron	Aging Infrastructure	No
Replacement of motor vehicles	Vehicles	Operational Efficiency	Yes

Source: JCAA consideration of MBJAL QQ3 financial model, AAJ's response to the draft determination received on April 17, 2025 and AAJ's response to the JCAA's request for clarification dated May 1, 2025.

On this basis, the Authority notes that c. 67% of the QQ3 CAPEX programme is covered by the Development Programme works, while the remainder is depreciated to the end of the Concession Agreement.

Finally, the Authority welcomes MBJAL's clarification regarding the economic life of taxiways and aprons. However, after the clarifications provided by the AAJ, the 'Runways/Aprons' asset category is now assumed not to be subject to the recoupment clause, and, hence, depreciated to the end of the concession agreement. With respect to the assumed useful lives of all other asset categories covered by the recoupment clause, the Authority notes that these are based on MBJAL's QQ3 business plan submission where available, and the Authority's final determination for QQ2 where such information is not provided.

The Authority's proposed depreciation policy for the final determination is summarised in Table 6.4.

**Table 6.4 JCAA's depreciation policy in the final determination**

Asset category	Useful life
Assets <b>not</b> under the recoupment clause	Remaining life of Concession Agreement
Assets under the recoupment clause (Building)	30 years
Assets under the recoupment clause (Leasehold improvement)	30 years
Assets under the recoupment clause (Furniture, Machinery)	10 years
Assets under the recoupment clause (Computers, Vehicles)	4 years

Note: The table shows the useful lives exclusively for assets covered by the recoupment clause, as all other assets will be depreciated until the end of the Concession Agreement.



# 7 Cost of capital

## 7.1 Methodology for calculating the weighted average cost of capital

Airport (and other sector) regulators typically base the allowed rate of return on their estimate of the company's WACC. The WACC represents an average of the company's cost of equity and cost of debt, weighted by its level of gearing (i.e. the proportion of net debt to the value of the business):<sup>71</sup>

$$\begin{aligned} WACC = & (cost\ of\ equity \times \% \ of\ equity\ funding) \\ & + (cost\ of\ debt \times \% \ of\ debt\ funding) \end{aligned}$$

Typically, the riskier the investment, the higher the cost of debt, cost of equity, and overall rate of return will be. The determination of the allowed rate of return therefore usually takes account of: i) prevailing financial market conditions; and ii) the specific risk exposure of the regulated airport.

The rate of return for SIA is determined based on a forward-looking estimation of the WACC.

## 7.2 MBJAL's WACC proposals

Table 7.1 sets out the WACC in the final determination by the Authority for QQ2 and MBJAL's estimated WACC for QQ3.

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<sup>71</sup> Tax can be dealt with in different ways depending on the approach taken to estimating the WACC. A vanilla WACC would capture tax separately, whereas, in a pre-tax WACC, the tax payments would be included in the WACC.

Table 7.1 WACC parameters

Parameter	JCAA FD for QQ2	MBJAL estimate for QQ3	MBJAL comments
Gearing	50.0%	50.0%	Continued use of a 50% gearing assumption
Nominal risk-free rate	2.69%	3.65%	Based on current US government five-year bond yield
Country risk premium	3.33%	5.02%	Based on analysis, higher than last review
Equity risk premium	6.00%	5.36%	Based on analysis, slightly below previous review estimate
Equity beta	1.29	1.35	Based on the same analysis used in the last review
Cost of equity	13.8%	16.1%	Calculation
Cost of debt	6.5%	8.0%	Based on the current cost of debt and projection of future cost (higher than previous review)
Tax rate	25%	25%	Tax rate is unchanged
<b>Nominal pre-tax WACC</b>	<b>12.42%</b>	<b>14.71%</b>	<b>The WACC is higher due to a higher risk-free rate, beta, country risk premium (CRP) and cost of debt</b>

Notes:

Source: MBJAL (2024), 'MBJ Airports Limited 3rd Quinquennial Airport Charges Review', Submission to JCAA, October 18, p. 27.

MBJAL's estimates for each parameter of the WACC for QQ3, as set out in its Business Plan, are discussed in further detail below.

### 7.2.1 Gearing

MBJAL has proposed to use a 50% gearing assumption, which is in line with the Authority's final determination for QQ2. The Authority's gearing assumption for QQ2 was based on the following:

- the level of gearing observed at airports with credit ratings that the Authority believes to be satisfactory (BBB and above);

- the average gearing for the air transport sector in emerging markets, according to Damodaran;<sup>72</sup>
- the Office of Utilities Regulation (OUR) determinations in Jamaica, comprising the 2019 determination for the electricity rate review and the 2016 determination for the telecoms review; and;
- MBJAL's current and projected levels of gearing from its business plan.

### 7.2.2 Risk-free rate

In its business plan, MBJAL noted that the risk-free rate is the expected return on a riskless asset and is commonly estimated using the return on US Treasury bonds. As the cost of capital is a forward-looking estimate, MBJAL relies on the current risk-free rate rather than a historical analysis of past returns. Consistent with the approach used by the OUR in its determination for the telecoms industry, MBJAL uses the spot Treasury bond yield curve (as at September 3, 2024) to determine the risk-free rate.

MBJAL considers the yield on five-year US Treasury bonds, which is equal to 3.65%, in recognition of the length of the rate review period, as well as the remaining length of the concession. In particular, given that there will be fewer than ten years remaining in the Concession Agreement at the start of QQ3, MBJAL argues that the ten-year yield proposed during QQ2 is not appropriate.

### 7.2.3 Country risk premium (CRP)

As the equity risk premium (ERP) estimate is based on the US market, MBJAL stated that it is necessary to take account of any difference in the level of investment risk between Jamaica and the US, by adding a CRP in the capital asset pricing model (CAPM).

Consistent with QQ2, MBJAL has looked at two sources to estimate the appropriate CRP: regulatory precedent and Damodaran's database. The latest OUR determination yielded a CRP estimate of 3.46%. Based on the January 2024 update to the annual report on CRPs, Damodaran has estimated the CRP of Jamaica to be 6.58%. MBJAL decides to use the average of the two methods to estimate the CRP, which is equal to 5.02%. MBJAL notes that this estimate is lower than what it proposed for QQ2 but higher than what the JCAA set in the QQ2 final determination.

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<sup>72</sup> Dr Aswath Damodaran, Professor of Finance at the Stern School of Business of New York University, publishes an extensive dataset of financial information for companies across sectors and countries.

#### 7.2.4 Equity risk premium (ERP)

The ERP measures the additional return demanded by investors to hold equity stocks over risk-free government bonds. MBJAL notes that measuring the ERP is challenging and is generally done using historical data as forward-looking data is not readily available. As such, MBJAL uses three main sources: historical premiums, implied premiums, and regulatory precedents. The range of estimates generated by these sources is set out in Table 7.2.

Table 7.2 MBJAL's estimated equity risk premium

Approach	Range	Average	MBJAL's comments
Historical premiums	4.60–5.90%	5.25%	MBJAL considers US equity premium over US bills and US bonds, based on Credit Suisse data for the period 1900–2022
Implied premiums	4.24–5.96%	5.19%	MBJAL considers the implied equity premium estimated by Damodaran for the years 2018–23
Regulatory precedents	5.63%	5.63%	2021 OUR determination for the telecoms industry

Source: MBJAL (2024), 'MBJ Airports Limited 3rd Quinquennial Airport Charges Review', Submission to JCAA, October 18, pp. 32–33.

Based on the above evidence, MBJAL suggests using an ERP estimate of 5.36%, which represents the average of the three approaches. This is slightly lower than the ERP used in the last review.

#### 7.2.5 Asset beta

The beta measures the sensitivity of the returns of a company to the market as a whole.<sup>73</sup> As MBJAL is not a publicly listed company, it has used

<sup>73</sup> A beta of less than one indicates a less risky investment than the market, while a beta of more than one indicates a more risky investment.

a comparative analysis of other airport asset betas,<sup>74</sup> consistent with the methodology used in the last rate review.

MBJAL provides a list of asset betas from international airports, including those in mature and developing markets.<sup>75</sup> Based on this list, MBJAL estimates an average asset beta of 0.69. The estimated average asset beta for airports in developing markets is 0.76 and the average for airports in mature markets is 0.62. The three Mexican airport operators (including MBJAL's parent company GAP), with an average asset beta of 1.07, are included in the sample.

MBJAL also considers asset betas set by other regulators, namely for Heathrow Airport, airports in New Zealand, airports in Ireland, and ENAC (Aeroporti di Roma). The asset betas for these airports range from 0.44 to 0.62, slightly below the overall average (0.69).

MBJAL uses the overall average asset beta for the whole sample of airports (0.69) for SIA for QQ3.

### 7.2.6 Debt beta

MBJAL notes that in the last rate review the Authority included a debt beta in the CAPM.<sup>76</sup> MBJAL proposes not to include a debt beta as part of this rate review. It notes that a debt beta is meant to indicate the level of risk associated with defaulting on debt and it argues that '[i]t is incredibly rare for airports to file for bankruptcy (versus airlines, for example)'. MBJAL mentions the COVID-19 pandemic as an example, since almost all airports continued to operate despite the global crisis. MBJAL also believes that, given the time remaining in the Concession Agreement, the risk of default for MBJAL is minimal and thus the debt beta can be assumed to be zero.

Moreover, MBJAL mentions some regulatory precedents for not including a debt beta:

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<sup>74</sup> The asset beta is used to compare across airports, as it separates financial risk from asset risk (whereas the equity beta reflects both financial and asset risk).

<sup>75</sup> The Authority notes that the proposed beta sample differs from the sample proposed by MBJAL in QQ2 as it includes five additional listed airport operators (Copenhagen Airport, Hainan Meilan International Airport, Shanghai International Airport, Shenzhen Airport, and Xiamen International Airport) and excludes Malta International Airport. We understand from MBJAL that the exclusion of Malta International Airport in the latest submission is due to the unavailability of market data for the airport operator.

<sup>76</sup> Regulators usually make use of this model to set the allowance for the cost of equity. In the CAPM, the calculation of the cost of equity is based on three building blocks: (i) the risk-free rate – which captures the required return on a riskless asset; (ii) the equity beta—which measures the company's exposure to systematic risk; and (iii) the ERP—defined as the difference between the return expected from holding a diversified portfolio of securities and the risk-free rate.

- the OUR did not include a debt beta in setting the WACC for the telecoms industry;<sup>77</sup>
- the regulator in Ireland did not include a debt beta in setting the WACC for Dublin Airport;<sup>78</sup>
- the regulatory process for airports in New Zealand did not include a debt beta when the WACC was set.<sup>79</sup>

### 7.2.7 Equity beta

MBJAL derives an equity beta of 1.38, based on the gearing and the asset beta assumption detailed above and using the Harris–Pringle formula with zero debt beta.<sup>80</sup>

### 7.2.8 Cost of debt

MBJAL notes that the cost of debt has two components, one reflecting the current borrowing costs of the company and the other reflecting the cost of new debt.

MBJAL explains that, as of December 2023, it has borrowings from the Bank of Nova Scotia at one-month Secured Overnight Financing Rate (SOFR) plus 3.10%. It also shows the five-year historical trend for the one-month SOFR and notes that there was a reduction during the years of COVID-19, and then an increase, with a levelling-out over the last year to around 5.3%.

According to MBJAL, any new debt it obtains is likely to be within the range of, or higher than, the current rate. Therefore, MBJAL chooses to use 8.0% as the projected cost of debt for QQ3. It notes that this is higher than the last review but that this takes into account the current market conditions relative to 2019.

<sup>77</sup> OUR (2021), 'Estimate of the Weighted Average Cost of Capital for Telecommunication Carriers', Determination Notice, September 1, [https://our.org.jm/wp-content/uploads/2021/09/Estimate-of-the-Weighted-Average-Cost-of-Capital-for-Telecommunications-Carriers-Determination-Notice20210901\\_11203750-1.pdf](https://our.org.jm/wp-content/uploads/2021/09/Estimate-of-the-Weighted-Average-Cost-of-Capital-for-Telecommunications-Carriers-Determination-Notice20210901_11203750-1.pdf) (accessed November 29, 2024).

<sup>78</sup> Commission for Aviation Regulation (2022), 'Interim Review of the 2019 Determination in relation to 2023-2026,' Commission Paper 7/2022, December 23, [https://www.iaa.ie/docs/default-source/car-documents/1c-economic-regulation/final-decision-on-the-maximum-levels-of-airport-charges-at-dublin-airport-2023-2026.pdf?sfvrsn=6b8110f3\\_1](https://www.iaa.ie/docs/default-source/car-documents/1c-economic-regulation/final-decision-on-the-maximum-levels-of-airport-charges-at-dublin-airport-2023-2026.pdf?sfvrsn=6b8110f3_1) (accessed November 29, 2024).

<sup>79</sup> NZCC (2024), 'Review of Auckland Airport's 2022-2027 Price Setting Event', July 17, [https://comcom.govt.nz/\\_data/assets/pdf\\_file/0034/358837/Review-of-Auckland-AirportE28099s-2022-2027-Price-Setting-Event-Consultation-Paper-17-July-2024.pdf](https://comcom.govt.nz/_data/assets/pdf_file/0034/358837/Review-of-Auckland-AirportE28099s-2022-2027-Price-Setting-Event-Consultation-Paper-17-July-2024.pdf) (accessed November 29, 2024).

<sup>80</sup> See Oxera (2023), 'Finding the right formula: de-levering and re-levering the beta in the CAPM', *Agenda*, January 31, <https://www.oxera.com/insights/agenda/articles/finding-the-right-formula-de-levering-and-re-levering-the-beta-in-the-capm/> (accessed December 16, 2024).

### 7.3 The JCAA's draft determination

The Authority's proposed draft determination for the WACC is presented in Table 7.3.

Table 7.3 The JCAA's WACC estimate - draft determination

Parameter	MBJAL estimates for QQ3	JCAA estimates for QQ3 DD	Sources of evidence
Gearing	50.0%	55.0%	Assumed notional gearing level, which is consistent with a prudent debt capacity for MBJAL, emerging market averages for the air transport sector from Damodaran, and regulatory precedent
Nominal risk-free rate	3.65%	4.41%	Forward-rate on ten-year US government bond yields for the midpoint of QQ3 (i.e. approximately three years from the date of the determination)
Country risk premium	5.02%	3.01%	Difference between Jamaica and US Treasury ten-year bond yields over the last five years
Equity risk premium	5.36%	6.01%	Based on historical ERPs from DMS, implied ERPs from Damodaran, and regulatory precedents
Asset beta	0.69	0.80	Based on the comparator sample provided by MBJAL, adjusted for the outcomes of the liquidity test. Market data updated as of January 2025
Debt beta	0.00	0.05	2008 study from Shaefer, S.M. and Strebulaev, I.A. and credit rating of its parent company Grupo Aeroportuario del Pacifico
Equity beta	1.38	1.71	Based on Harris–Pringle formula using asset beta, debt beta, and gearing assumptions above
Post-tax cost of equity	16.1%	17.7%	Calculated based on the above inputs
Tax rate	25.0%	25.0%	Based on the corporation tax rate
<b>Pre-tax cost of equity</b>	<b>21.4%</b>	<b>23.6%</b>	<b>Derived from the post-tax cost of equity and the tax rate</b>

Parameter	MBJAL estimates for QQ3	JCAA estimates for QQ3 DD	Sources of evidence
Nominal cost of debt	8.0%	8.0%	Projected cost of debt, based on MBJAL's business plan
Nominal pre-tax WACC	14.7%	15.0%	Calculated based on the above inputs

Source: JCAA.

A more detailed explanation of the Authority's assumptions as set out in the draft determination is provided below.

### 7.3.1 Gearing

The Authority proposed a notional gearing assumption of 55%, based on a review of the following evidence (as also considered in QQ2):

- the level of gearing used by credit rating agencies when assessing the rating of airports with credit ratings that the JCAA believes to be satisfactory (BBB- and above);
- the average gearing for the air transport sector in emerging markets, according to Damodaran;
- recent OUR determinations for utility companies in Jamaica.

On the basis of this evidence, further explained below, the Authority's proposed gearing for the QQ3 draft determination was slightly higher than MBJAL's proposed gearing assumption and the notional gearing level set for QQ2 (equal to 50%).

### Information from credit rating agencies

In order to infer an appropriate gearing ratio for MBJAL based on credit rating agencies' reports, the Authority has looked at Moody's ratings of Grupo Aeroportuario del Pacifico (GAP), as GAP owns a majority stake in MBJAL, as well as in Mexican airports with similar characteristics to SIA. On April 21, 2020, Moody's downgraded GAP's credit rating from A3 to Baa1.<sup>81</sup> On February 25, 2022, Moody's also assigned a Baa1 rating to the senior unsecured *certificados bursatiles* due 2027 and 2032 issued by

<sup>81</sup> Cbonds (2020), 'Moody's Investors Service downgrades LT- local currency credit rating of Grupo Aeroportuario del Pacifico to "Baa1"; outlook negative', April 22, <https://cbonds.com/news/1227065/> (accessed December 11, 2024).

GAP.<sup>82</sup> As at June 30, 2024, GAP had a total gearing ratio of 69%,<sup>83</sup> which represented a significant increase compared to six years ago, when the total gearing ratio of GAP was equal to 48.5%.<sup>84</sup>

### Evidence from Damodaran

As of January 5, 2025, Damodaran calculated the book and market gearing ratio for the air transport sector in emerging markets as 71% and 47% respectively. The Authority noted that, compared to six years ago, both gearing ratios have substantially increased.<sup>85</sup> However, the sample considered by Damodaran also included airlines and air transport infrastructure funds, which reduce its reliability for determining an appropriate gearing level for MBJAL.

### Recent OUR determinations

The OUR's 2021 determination of the WACC for fixed line and mobile carriers set optimal (notional) gearing levels of 35.5% and 35.7% respectively.<sup>86</sup> These values represented a significant increase from the gearing levels set in the 2016 telecoms review—considered as part of the QQ2 rate review—which were 22.5% and 20% for fixed line and mobile carriers respectively. The OUR's approach is also informed by regional estimates of the gearing from Damodaran.

### Conclusions on the gearing assumption

In the draft determination, the Authority considered a notional gearing assumption of 55% to be appropriate. This represented an increase from the 50% notional gearing assumed in QQ2, reflecting evidence of a rise in gearing ratios compared to the previous rate review. This increase may be attributed to the lingering impact of COVID-19, during which companies

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<sup>82</sup> See Moody's (2022), 'Grupo Aeroportuario del Pacifico, SAB de CV -- Moody's rates proposed certificados bursatiles 2022 of Grupo Aeroportuario del Pacifico', February 25, <https://finance.yahoo.com/news/grupo-aeroportuario-del-pacifico-sab-174114508.html> (accessed December 11, 2024).

<sup>83</sup> Calculated as  $(MXP41,836m)/(MXP41,836m + MXP18,900m)$ . See GAP (2024), 'Grupo Aeroportuario del Pacifico announces results for the second quarter of 2024', p. 18, [https://www.aerpuertosgap.com.mx/images/files/GAP%20-%202Q24\\_ENG\\_VF.pdf](https://www.aerpuertosgap.com.mx/images/files/GAP%20-%202Q24_ENG_VF.pdf) (accessed December 16, 2024) and GAP (2024), '2Q24 Corporate Presentation', p. 49, [https://www.aerpuertosgap.com.mx/files/CORPORATE\\_PRESENTATION\\_2Q24\\_VF.pdf](https://www.aerpuertosgap.com.mx/files/CORPORATE_PRESENTATION_2Q24_VF.pdf) (accessed December 16, 2024).

<sup>84</sup> GAP (2019) 'Annual Report 2018', p. 19.

<sup>85</sup> As at January 5, 2019, the book and market gearing ratio for the air transport sector in emerging markets was respectively 53% and 43%.

<sup>86</sup> OUR (2021), Estimate of the Weighted Average Cost of Capital for Telecommunication Carriers, *Determination Notice*, September 1, pp. 19–23, [https://our.org.jm/wp-content/uploads/2021/09/Estimate-of-the-Weighted-Average-Cost-of-Capital-for-Telecommunications-Carriers-Determination-Notice20210901\\_11203750-1.pdf](https://our.org.jm/wp-content/uploads/2021/09/Estimate-of-the-Weighted-Average-Cost-of-Capital-for-Telecommunications-Carriers-Determination-Notice20210901_11203750-1.pdf) (accessed November 29, 2024).

needed to significantly increase their leverage. The Authority noted it would reassess this assumption in QQ4 to determine whether the observed rise in gearing ratios represented a temporary response to the pandemic or a more structural shift.

The Authority highlighted that a 55% gearing assumption aligns with the notional gearing levels considered reasonable within international regulatory frameworks for the aviation sector. For instance:

- Heathrow Airport: the UK Civil Aviation Authority (CAA) set a notional gearing assumption of 60% in its regulatory framework for the H7 price control;<sup>87</sup>
- Dublin Airport: the Irish Aviation Authority used a notional gearing assumption of 50%.<sup>88</sup>

### 7.3.2 Risk-free rate

MBJAL was proposing a risk-free rate of 3.65%, based on the spot yield to maturity on a five-year US Treasury bond.

Regarding the five-year yields proposed by MBJAL, the Authority did not see any strong reasons to deviate from the approach established in the final determination for QQ2, which was based on ten-year yields. The Authority also noted that the remaining life of the Concession Agreement at the start of QQ3 exceeds eight years,<sup>89</sup> and is therefore closer to ten than five years.

The Authority did not consider MBJAL's proposal to use a spot estimate from more than a year before the start of QQ3 to be appropriate. Instead, it proposed estimating the risk-free rate based on the forward rate of ten-year maturity US Treasury bonds at the midpoint of the QQ3 period. This estimate was derived from the forward rate three years from December 2024. Using the forward yield curve offers a more precise forward-looking assessment than relying on a spot yield curve, as it better reflects market expectations for future interest rates.

As shown in Figure 7.1, this resulted in an estimate for the nominal risk-free rate of 4.41%.

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<sup>87</sup> CAA (2023), 'Economic regulation of Heathrow Airport Limited: H7 Final Decision', Section 3: Financial issues and implementation, CAP2524D, table 9.6, March.

<sup>88</sup> Irish Aviation Authority (2022), 'Decision on an Interim Review of the 2019 Determination in relation to 2023-2026', Commission Paper 7/2022, Table 10.2, December 23.

<sup>89</sup> Taking into account the one-year extension of the Concession Agreement until March 2034, granted in response to the COVID-19 pandemic. See: MBJAL (2024), 'MBJ Airports Limited 3rd Quinquennial Airport Charges Review', Submission to JCAA, October 18, p. 6.

Figure 7.1 Nominal forward curve for ten-year US government bonds



Source: Bloomberg.

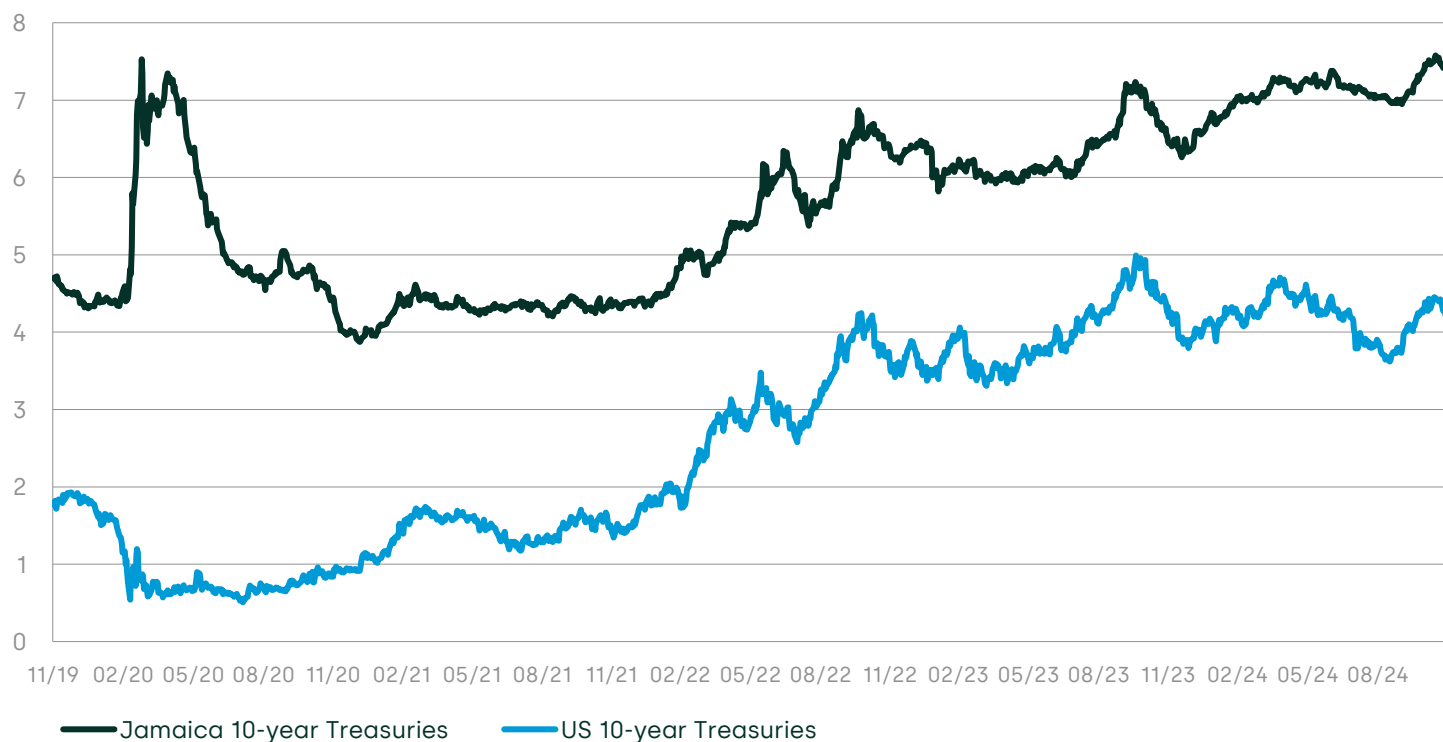
### 7.3.3 Country risk premium

Consistent with its proposals on the risk-free rate and in line with the final determination for QQ2, the Authority has compared ten-year yields on Jamaican government bonds with ten-year yields on US government bonds. The Authority has averaged the difference in yields over a five-year period to determine the CRP and estimated a CRP equal to 3.01%.

This approach is in line with that used in the latest OUR determination for the telecoms industry, which has also been considered by MBJAL in its proposal for the CRP.

As shown in Figure 7.2 below, while the Jamaican CRP has sharply increased to above 6% in the context of COVID-19, the difference in yields since then has been between 2.0% and 3.5%. This trend supports the argument for a stable long-term average of approximately 3% for this parameter, which is also in line with the final determination for QQ2.

Figure 7.2 Comparison between Jamaica and US ten-year government bond yields, 2019–24



Source: Bloomberg.

### 7.3.4 Equity risk premium

The Authority's estimate for the ERP was based on the same sources used by MBJAL: the historical ERPs, the implied ERPs, and regulatory precedent. However, for each of these sources the Authority considered different data, due either to the availability of more updated data or to the adoption of a different methodology.

- **Historical ERPs:** the Authority considered the average of the geometric and arithmetic mean for the risk premium over US bills, based on DMS data for 1900–2023.<sup>90</sup> This resulted in an estimate of 6.95%.
- **Implied ERPs:** the Authority considered the average implied ERP estimated by Damodaran for the years 2020–24, which was equal to 4.77%.<sup>91</sup>

<sup>90</sup> Dimson, E., Marsh, P. and Staunton, M. (2024), 'UBS Global Investment Returns Yearbook 2024', p. 241.

<sup>91</sup> NYU Stern (2024), 'Historical Implied Equity Risk Premiums, Implied Premium (DDM)', January, [https://pages.stern.nyu.edu/~adamodar/New\\_Home\\_Page/datafile/histimpl.html](https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/histimpl.html) (accessed December 13, 2024).

- **Regulatory precedents:** the Authority considered both the 2021 OUR determination for the telecoms industry<sup>92</sup> and the 2023 Input Methodology Review of the New Zealand Commerce Commission.<sup>93</sup>

Table 7.4 The JCAA's estimate for the ERP

Approach	Range	Average	The JCAA's comments
Historical premiums	6.00–7.90%	6.95%	The Authority considered the geometric and arithmetic mean of US equity premium over US bills, based on Credit Suisse data for the period 1900–2023
Implied premiums	4.24–5.94%	4.77%	The Authority considered the implied equity premium estimated by Damodaran for the years 2020–24
Regulatory precedents	5.63–7.00%	6.32%	The Authority considered the 2021 OUR determination for the Telecom industry and 2023 Input Methodologies Review of the New Zealand Commerce Commission
<b>Average</b>	-	<b>6.01%</b>	-

Source: JCAA.

Based on the above evidence, the Authority adopted a 6.01% ERP resulting from the average of historical ERPs, implied ERPs, and regulatory precedents. This value is in line with that set in the final determination for QQ2.

<sup>92</sup> OUR (2021), op. cit., September 1, p. 48.

<sup>93</sup> New Zealand Commerce Commission (2023), 'Part 4 Input Methodologies Review 2023 – Final decision', Cost of capital topic paper, p. 9, December 13, [https://comcom.govt.nz/\\_data/assets/pdf\\_file/0022/337612/Part-4-IM-Review-2023-Final-decision-Cost-of-capital-topic-paper-13-December-2023.pdf](https://comcom.govt.nz/_data/assets/pdf_file/0022/337612/Part-4-IM-Review-2023-Final-decision-Cost-of-capital-topic-paper-13-December-2023.pdf) (accessed December 13, 2024).

### 7.3.5 Asset beta

In line with the final determination for QQ2, the Authority relied on the set of airports provided by MBJAL, separated into mature and developing markets. Given that the Authority is allowing a CRP to reflect the additional risk of investing in Jamaica relative to the US (see section 7.3.3), focusing on emerging markets only would not be appropriate. As such, the Authority welcomed MBJAL's proposal to focus on the overall average, rather than on the average for emerging markets only. However, going forward the Authority expects MBJAL to ensure consistency in the choice of the beta sample across regulatory periods.

In line with regulatory best practice, the Authority has undertaken liquidity tests on the sample provided by MBJAL to exclude potential illiquid stocks that may affect the reliability of the average asset beta. In particular, the sample has been filtered based on the bid–ask spread and the number of zero return days.<sup>94</sup> This liquidity analysis led to the exclusion of the following airports from the sample proposed by MBJAL: (i) Flughafen Wien AG, (ii) Copenhagen Airports A/S, (iii) Malta International Airport plc, and (iv) Airports of Thailand.<sup>95</sup>

Table 7.5 shows the Authority's estimates for the asset betas of the comparator sample (after the liquidity filters), based on the latest available market data.<sup>96</sup>

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<sup>94</sup> Regarding the bid–ask spread, companies with an average bid-ask spread over the last five years higher than 1% were excluded. As per the number of zero-return days, companies with an average percentage of trading days with no price change over the previous five years higher than 10% were also excluded.

<sup>95</sup> In particular, (i) Flughafen Wien AG has shown a percentage of zero-return days equal to 14%; (ii) Copenhagen Airports A/S has shown a bid-ask spread of 1.5% and a percentage of zero-return days equal to 13%; (iii) Malta International Airport plc has shown a percentage of zero-return days equal to 45%; and (iv) Airports of Thailand has shown a percentage of zero-return days equal to 15%.

<sup>96</sup> The JCAA's calculations are updated as of December 13, 2024. The asset beta calculations are based on the five-year average of five-year daily betas downloaded from Bloomberg, using a 0.05 debt beta assumption.

Table 7.5 The JCAA's estimates of asset betas for SIA's comparator sample

Airport operator	Asset beta
Flughafen Zuerich AG	0.77
Fraport Frankfurt Airport AG	0.59
Aeroports de Paris SA	0.77
Auckland International Airport	1.01
Grupo Aeroportuario del Pacifico (GAP)	1.15
Grupo Aeroportuario del Sureste (ASUR)	0.97
Grupo Aeroportuario del Centro Norte (OMAB)	1.11
Guangzhou Baiyun International Airport	0.72
Airport Facilities (Japan)	0.55
Beijing Capital International Airport	0.67
Japan Airport Terminal	1.02
Hainan Meilan International Airport	0.90
Shanghai International Airport	0.63
Shenzhen Airport	0.53
Xiamen International Airport	0.56
<b>Average</b>	<b>0.80</b>

Source: JCAA's analysis based on Bloomberg data (updated as of December 13, 2024). The figures refer to the five-year average of five-year daily asset betas. The calculations of asset betas are based on the assumption of a 0.05 debt beta.

On this basis, the Authority estimated the average asset beta for SIA to be equal to **0.80**.

### 7.3.6 Debt beta

According to the UK CAA in the context of the final decision for Heathrow's most recent price review, the debt beta 'represents the proportion of a company's systematic risk exposure that is attributable to debt'.<sup>97</sup> In the draft determination, the Authority considered that it is appropriate to include an estimate of the debt beta for MBJAL, to reflect the sensitivity

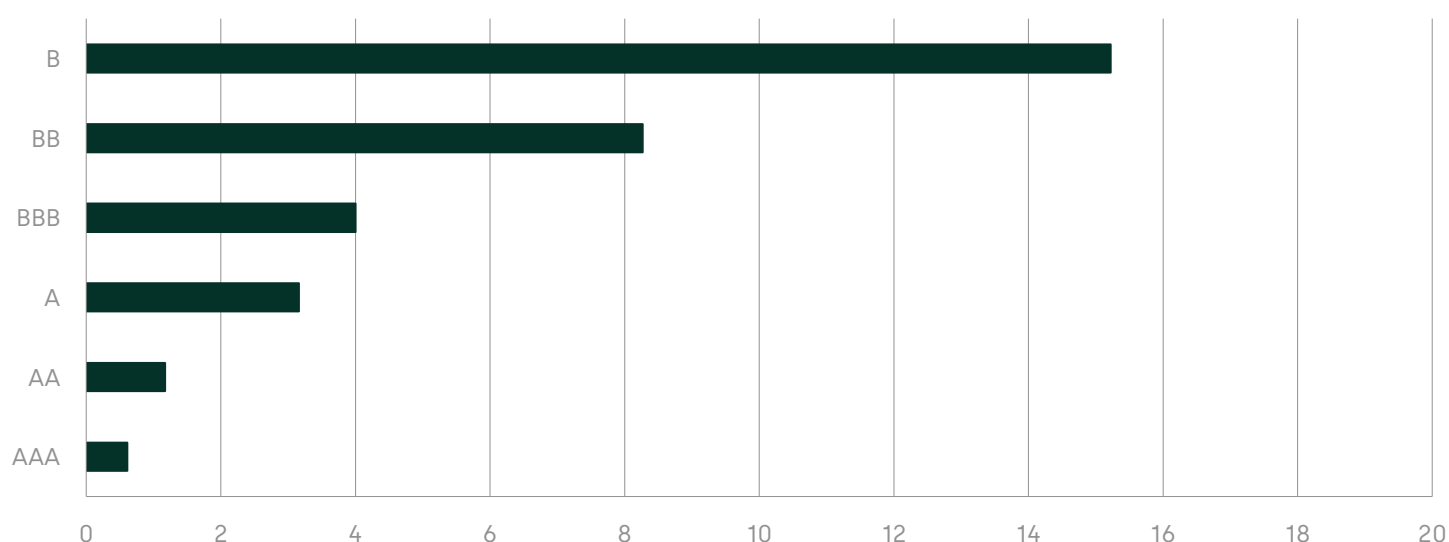
<sup>97</sup> CAA (2023), 'Economic regulation of Heathrow Airport Limited: H7 Final Decision', Section 3: Financial issues and implementation, CAP2524D, para 9.44, March.

of the market value of MBJAL's debt to changes in broader macroeconomic conditions and systematic risk factors.

Since MBJAL is not a public company and does not receive a direct credit rating from a credit rating agency, the Authority proposed to estimate the debt beta starting from Moody's assigned credit rating for GAP.

After determining the credit rating, the Authority assigned a debt beta based on a study by Schaefer and Strebulaev,<sup>98</sup> which found for companies with a credit rating of BBB,<sup>99</sup> a sensitivity of corporate bond returns to equity of four basis points (bps).

Figure 7.3 Debt betas by credit rating (bp)



Source: Based on Schaefer and Strebulaev (2008).

Given GAP's credit rating of Baa1 (the top notch of the Baa banding),<sup>100</sup> the Authority considered that MBJAL should also be able to obtain a credit rating somewhere in the Baa or Ba band. As such, and in line with the final determination for QQ2, the Authority estimated the debt beta for MBJAL to be 0.05.

<sup>98</sup> Schaefer, S.M. and Strebulaev, I.A. (2008), 'Structural models of credit risk are useful: evidence from hedge ratios on corporate bonds', *Journal of Financial Economics*, 90, pp. 1–19.

<sup>99</sup> Equivalent to Baa for Moody's.

<sup>100</sup> Cbonds (2020), 'Moody's Investors Service downgrades LT- local currency credit rating of Grupo Aeroportuario del Pacifico to "Baa1"; outlook negative', April 22, <https://cbonds.com/news/1227065/> (accessed December 11, 2024).

### 7.3.7 Equity beta

The Authority re-levered the 0.80 asset beta using its gearing and debt beta assumptions, resulting in an equity beta of 1.71.

### 7.3.8 Corporation tax rate

The Authority retained MBJAL's assumption for the corporation tax rate of 25%.

### 7.3.9 Cost of debt

The Authority accepted MBJAL's proposed nominal cost of debt of 8.0%, which is based on MBJAL's current financing costs.

## 7.4 Responses to the draft determination

In response to the draft determination, MBJAL has raised concerns with a few areas of the Authority's cost of capital methodology, as follows:

- **Gearing:** Based on the fact that MBJAL's current level of gearing is 43%, it argues that a 50% gearing assumption already allows for a sufficient buffer, and that the Authority's assumption of 55% is excessive. This is particularly the case given the limited time left in the concession, and the fact that MBJAL does not believe it will need to raise additional debt for SIA.
- **Risk free rate:** MBJAL has requested further explanation of the use of forward rather than spot rates in the Authority's approach.
- **Country risk premium:** MBJAL has requested that the Authority consider other information when assessing the country risk premium, besides just Damodaran's CRP estimates. It also states that the Authority's calculations are materially below that of Damodaran, understating the actual risk present.
- **Debt beta:** MBJAL has questioned the inclusion of a debt beta citing that there are no examples of airports defaulting on debt as a result of COVID-19. It believes the Authority's debt rating should also reflect more up to date data, especially given the low levels of gearing at MBJAL.

## 7.5 The JCAA's final determination

Regarding the concerns raised by MBJAL, the Authority makes the following observations.

### Gearing

The Authority has decided to retain its proposed estimate of 55%. The Authority reiterates its position that the notional gearing should reflect an industry benchmark, rather than the specific gearing of the regulated entity. Nonetheless, the Authority notes that the gearing level of MBJAL's

parent company, GAP, is one of several reference points considered in informing the notional gearing estimate.

Furthermore, all sources used in the draft determination to support the notional gearing assumption indicate a general upward trend in gearing ratios. As noted in the draft determination, this trend is likely attributable to the lingering effects of the COVID-19 pandemic. In the absence of conclusive evidence as to whether this increase reflects a temporary shock or a structural shift in the sector's capital structures, the Authority considers it appropriate to moderately increase the notional gearing to 55%, while committing to reassess this assumption in QQ4.

The Authority also notes that a full reflection of the increase in gearing over the past five years—based on the available evidence—would suggest a notional gearing level higher than 55%. For example:

- GAP's total gearing ratio increased significantly over the past six years, moving from 48.5% to 69%;
- Damodaran's estimated market gearing ratios for the air transport sector in emerging markets rose from 53% to 71%.

### Risk-free rate

The Authority maintains its position of relying on forward rates to set the risk-free rate allowance, in line with QQ2. Using the forward yield curve offers a more precise forward-looking assessment than relying on a spot yield curve, as it better reflects market expectations for future interest rates.

This position is supported by regulatory precedents. For example, the Italian Regulatory Authority for Energy, Networks and Environment (ARERA) includes a forward premium (FP) in setting the risk-free rate.<sup>101</sup> Similarly, the UK energy regulator Ofgem's approach is also supportive of the use of forward rates. Although Ofgem updates the risk-free rate annually based on a spot rate index,<sup>102</sup> in its final determination for RIIO-2, it presented a forecast of 20-year index-linked gilt (ILG) yields for the five-year control period, which was derived using forward rates.<sup>103</sup>

### Country risk premium (CRP)

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<sup>101</sup> ARERA (2021), Decision 614/2021/R/com, *Attachment A*, December 23.

<sup>102</sup> Ofgem (2024), RIIO-3 Sector Specific Methodology Decision – Finance Annex, July 18.

<sup>103</sup> Ofgem (2021), RIIO-2 Final Determination – Finance Annex (REVISED), Table 7, February 3.

The Authority has decided to retain its proposed CRP estimate of 3.01%, for the following reasons.

Firstly, the Authority notes that Damodaran estimates the country risk premium by adjusting the sovereign default spread using a ratio that reflects the relative volatility of the equity market compared to the debt market. While the Authority does not consider it necessary to assess the technical details of this adjustment at this stage, it observes that such a methodology does not appear to align with standard industry practice.

Furthermore, in the absence of Jamaican sovereign bonds denominated in USD or EUR, Damodaran derives Jamaica's country default spread exclusively based on the traded sovereign credit default swaps (CDS) of other countries that share the same sovereign credit rating as Jamaica. As a result, according to Damodaran's methodology, Jamaica is assigned the same country default spread as other countries, such as Gambia, Senegal, and Turkey—without accounting for the specific risks of the Jamaican market.

The Authority disagrees with MBJAL's argument that it has not been consistent in its use of Damodaran's data when determining the WACC parameters. The Authority's methodology is supported by the OUR regulatory precedent, which has used treasury yield spreads to inform the CRP in its recent determinations. Notably, in its 2014 electricity determination, the OUR rejected Damodaran's CRP estimate, citing a paper which stated that 'since Damodaran's CRP can be neither theoretically nor empirically supported, the rates of return on capital that are derived by such methods are highly arbitrary'.<sup>104</sup>

## Debt beta

In principle, the Authority agrees with MBJAL that the debt beta is positively correlated with the risk of default. While the Authority acknowledges MBJAL's argument that airports generally have a low default risk—demonstrated by the sector's resilience during the pandemic—it considers that this risk is not zero. Therefore, the assumption of a positive, albeit low, debt beta is reasonable.

The Authority clarifies that the selected debt beta value of 0.05 is derived from the methodology described in 7.3.6, and not solely informed by the UK CAA precedent. Additionally, the Authority clarifies that its reference

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<sup>104</sup> Kruschwitz, L., Loffler, A., and Mandl, G. (2012), 'Damodaran's Country Risk Premium: A serious Critique', *Business Valuation Review*, 31: 2/3, pp. 75–84.

to GAP's latest credit rating is due to the unavailability of a credit rating for MBJAL.

To conclude, after consideration of the arguments presented by MBJAL in its response, the Authority has retained the WACC set out in the draft determination.

# 8 Operating expenditure (OPEX)

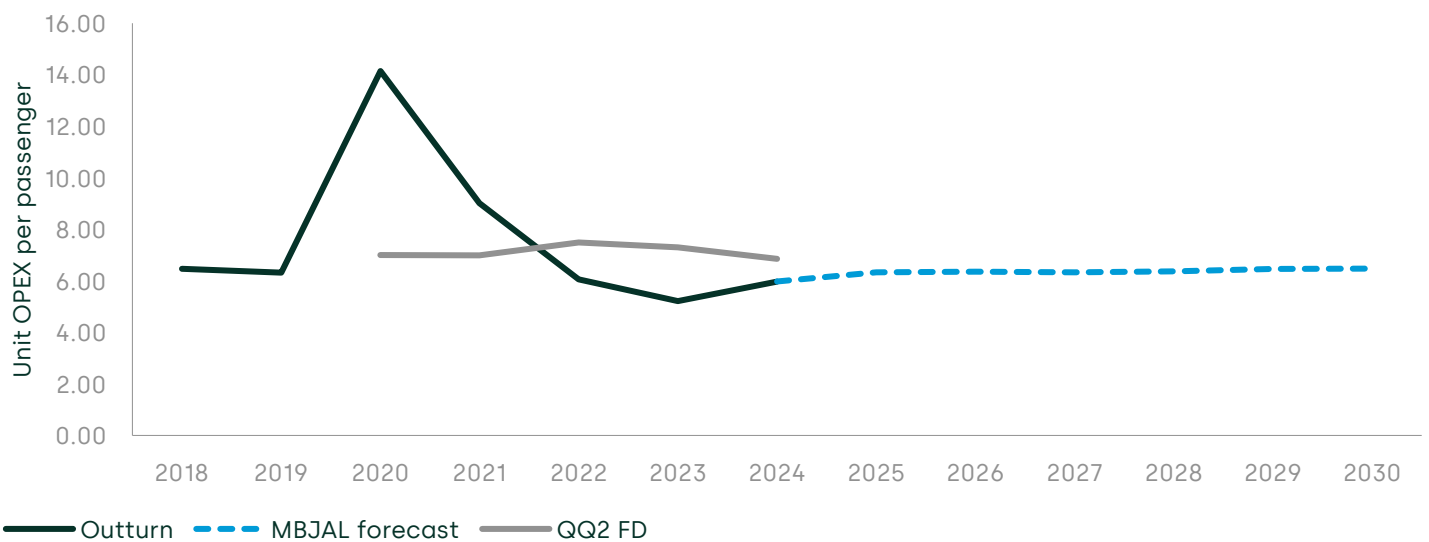
## 8.1 Background

The extent to which an airport's OPEX is efficient depends on a number of factors. In general, efficiency is a relative concept whereby, ideally, an airport's performance would be compared to 'best practice' and benchmarked against suitable comparators. In the case of SIA, there are some limitations in using a benchmarking approach. First, NMIA may be the only suitable comparator, given it is the only other airport operating under the same regulatory regime in the same country. In addition, other airports in Jamaica or across the Caribbean may not be suitable comparators for a number of reasons, including but not limited to: (i) different regulatory regimes; (ii) different regulatory accounting guidelines and cost-allocation policies; and (iii) country-specific cost pressures.

As noted in the draft determination, while there are limitations in benchmarking SIA's OPEX to other airports, a comparison of SIA's historical level of unit OPEX to other airports in the region shows that SIA had the third lowest real unit OPEX in 2023.

For these reasons, the Authority uses the trend in OPEX per passenger, or unit OPEX, as a starting indicator to help determine SIA's efficiency. Figure 8.1 below shows the trend in real unit OPEX at SIA over time, comparing outturn and forecast performance.

Figure 8.1 Real unit OPEX per year (\$/passenger, real 2025)



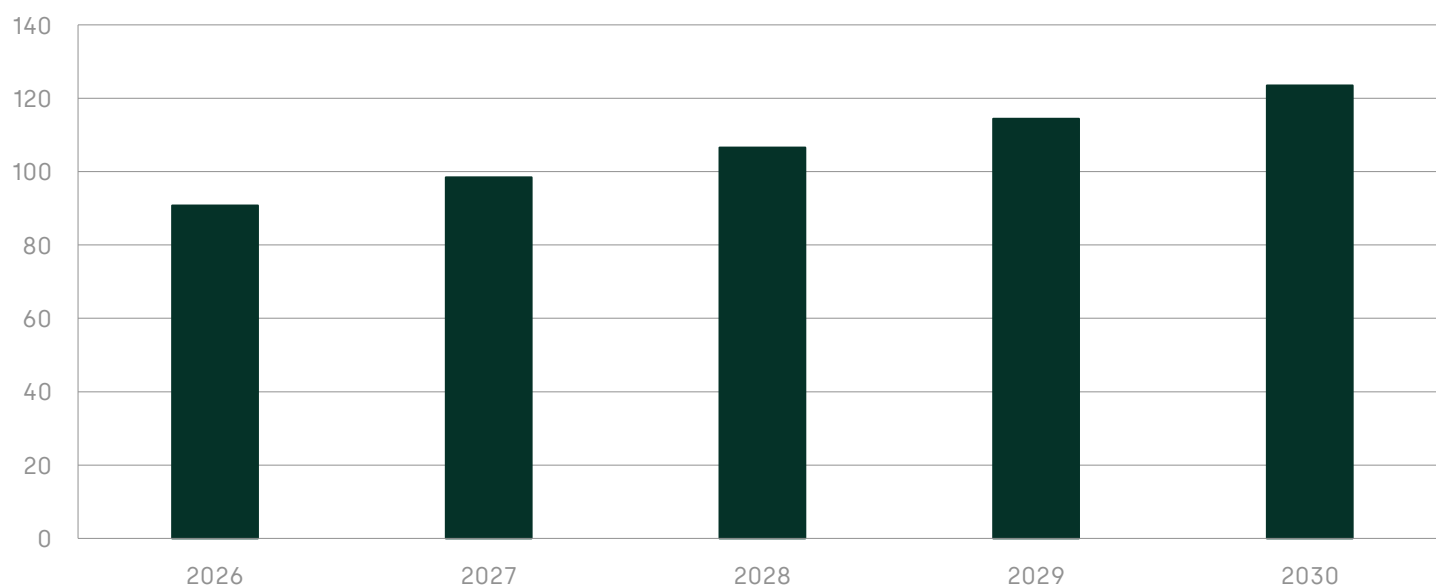
MBJAL's outturn unit OPEX was materially above the allowed OPEX per passenger set in QQ2 for 2020 and 2021 due to COVID-19. While MBJAL's total operating costs were lower than allowed OPEX, the sharp decline in passenger numbers during those years meant that unit OPEX remained elevated. However, between 2022 and 2024, MBJAL's OPEX per passenger was 20% lower than what was allowed as part of QQ2. This reflects a partial recovery in passenger volumes and reductions in total OPEX, particularly in cost categories such as utilities and repairs and maintenance. Together, these factors resulted in more efficient per-passenger costs in the latter part of QQ2.

## 8.2 MBJAL's OPEX forecasts

MBJAL forecasts an increase in OPEX during QQ3, as illustrated in Figure 8.2 below, reflecting the combined impacts of inflation, minimum wage-related increases, and expansion-related adjustments.

A significant driver of the forecast increase, according to MBJAL, is the rise in salaries and government-imposed minimum-wage increases in recent years, which are projected to result in sustained upward pressure on staff costs. Security costs are similarly expected to increase over QQ3, driven by higher deployment levels required to support passenger growth and new facility expansions.

Figure 8.2 Forecast OPEX during QQ3 (US\$m)



Note: OPEX includes concession fees (fixed and additional).  
Source: MBJAL 2024 business plan.

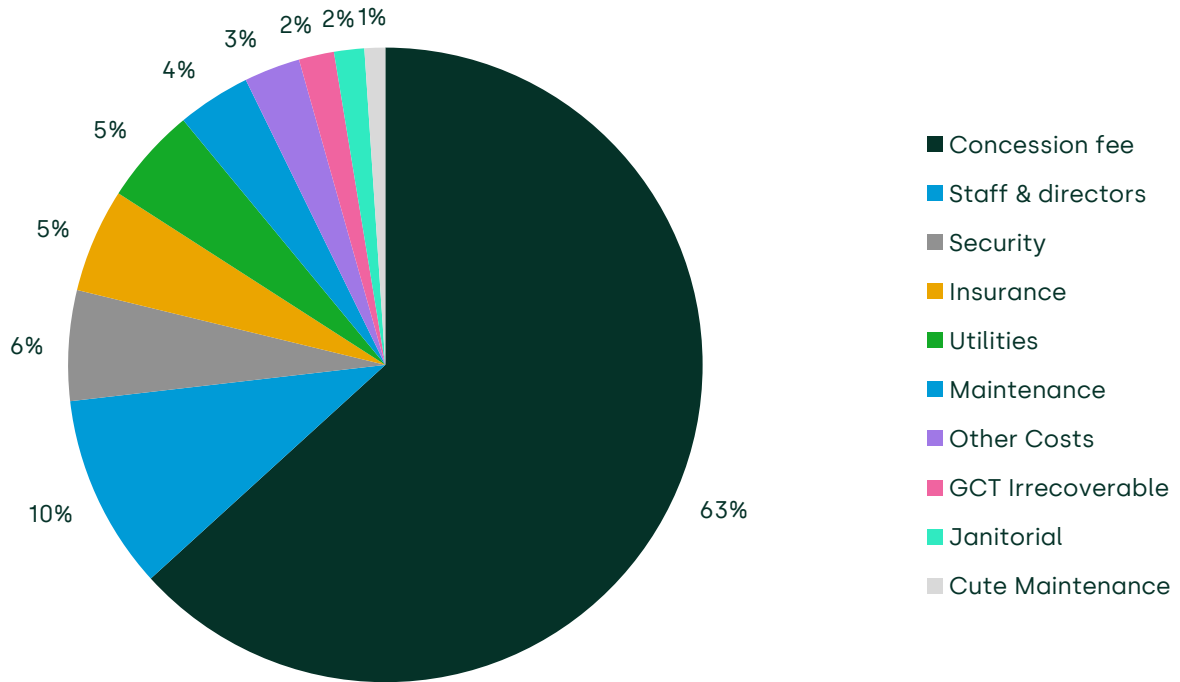
Repairs and maintenance costs are forecast to rise, reflecting the additional burden of maintaining new infrastructure and machinery. The forecast also incorporates increased costs for CUTE maintenance, as new biometric and passenger-processing systems are introduced to accommodate projected traffic growth.

In addition, insurance costs are set to increase due to a replacement cost valuation conducted for the expanded facilities, with further adjustments for compliance with the Concession Agreement.

Despite some expected efficiencies, such as reduced utility costs from increased solar power use, the overall upward trajectory of OPEX reflects the combined pressures of expansion and recent minimum wage increases.

Figure 8.3 below shows MBJAL's forecast OPEX over QQ3 by cost category. The key driver of costs is an increase in spend on insurance (by 36% per passenger across QQ3) and security (by 15% per passenger across QQ3).

Figure 8.3 Forecast OPEX over QQ3 by category



Note: Concession fee incorporates a fixed and an additional (variable) concession fee.  
 Source: MBJAL 2024 business plan.

### 8.2.1 Security costs

Security procedures at SIA are determined by the Jamaican government and international requirements, and security staff for certain services are required to be provided by a government body (PSC).<sup>105</sup> As a result, in QQ2, security costs were classified as an uncontrollable cost item as part of OPEX. In addition, unlike other uncontrollable cost items, in QQ2 the Authority applied a pass-through for these costs. This means that if security costs deviate from the forecast, the difference should be directly passed through to customers.

During the QQ2 period, SIA experienced significant increases in security costs due to a number of legal changes:

- an increase in the minimum wage resulting in an increase of 55% in the wage rate for security guards between 2021 and 2024;

<sup>105</sup> Private entities, Guardsman Limited and SecuriPro Limited, provide landside security services at SIA.

- a security guard rate increase announced by the government in March 2023 (initially resulting in a 33.3% increase in 2023 with a subsequent 7.14% increase in 2024); and
- the reclassification of security guards working for private entities as employees, rather than contract workers, in September 2023 by the Supreme Court, resulting in a 40% increase in security guard rates as of April 1, 2023.

The above changes, particularly the Supreme Court decision, resulted in a significant increase in the rate paid by MBJAL to private security firms such that it exceeded the rate paid to PSC.<sup>106</sup> Additionally, resource constraints at PSC were exacerbated by the fact that PSC's wages had decreased relative to those of private firms, leading PSC to seek to increase its rate at SIA to bring its wages in line with these firms.

These developments, coupled with the extension of the QQ2 period by one year, culminated in MBJAL seeking an off-cycle review of security costs for 2025.<sup>107</sup> Given the circumstances, the Authority agreed that an adjustment of \$0.38 per passenger would be made for the period between January 1, 2025 and December 31, 2025.

While the off-cycle review was conducted separately and its outcome has no direct bearing on the QQ3 determination, the Authority has considered the recent trends in security costs dealt with in the off-cycle review as part of its determination for the QQ3 review.

Additionally, MBJAL has highlighted in its business plan that security costs—largely driven by external factors such as regulatory changes, international obligations, and government-mandated wage increases—continue to be beyond its control.<sup>108</sup> These costs have the potential to rise during the upcoming regulatory period, as evidenced by past increases in 2023 and 2024.

In its business plan, MBJAL originally presented a case for the incorporation of an 'S-term' in the price cap formula to allow for mid-period adjustments to airport charges, specifically to account for uncontrollable increases in security costs. According to MBJAL, introducing an S-term would have allowed uncontrollable security cost increases to be addressed transparently and separately, avoiding their inclusion in the yield and supporting operational flexibility.

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<sup>106</sup> PSC is a public entity and the mandated provider of aviation security and hold baggage screening (HBS) services at both airports. Other services, such as landside security, can be provided by private entities.

<sup>107</sup> Letter of June 14, 2024.

<sup>108</sup> MBJAL (2024), '3rd Quinquennial Airport Charges Review Submission to Jamaica Civil Aviation Authority', October 18, p. 16.

## 8.3 The JCAA's draft determination

### 8.3.1 OPEX elasticities

OPEX elasticities reflect the responsiveness of operating costs to changes in passenger volumes. Establishing robust elasticities is important in determining efficient cost forecasts and aligning expenditure with expected traffic growth.

In the absence of additional evidence or analysis from MBJAL regarding proposed changes to OPEX elasticities for QQ3, in the draft determination, the Authority proposed to maintain the OPEX elasticities previously established for QQ2. These elasticities were derived using historical data and through benchmarking.

However, to ensure that the QQ2 elasticities continued to be appropriate for QQ3, further benchmarking was conducted. This included assessing regulatory precedent—in particular, the regulatory determinations for Heathrow and Dublin airports. This evidence indicated that similar elasticity assumptions as in QQ2 are appropriate for QQ3.<sup>109</sup>

The proposed OPEX elasticities for QQ3 are outlined in Table 8.1.

Table 8.1 OPEX elasticities, QQ3

Elasticities	QQ3
Staff costs	40%
Security	30%
Repairs and maintenance	30%
Janitorial and cleaning	15%
Utilities	30%
Other	25%

Source: JCAA (2025).

### 8.3.2 OPEX cost categorisation

The classification of operating costs into controllable and uncontrollable is critical for determining the applicability of efficiency targets and

<sup>109</sup> Heathrow Airport (2020), 'H7 Revised Business Plan (Detailed)', December.

ensuring a fair assessment of the airport's operational performance.<sup>110</sup> Unlike CAPEX, all (efficient) OPEX will be recovered from customers during the course of QQ3. In the draft determination, the Authority considered the majority of cost categories to be at least partially controllable in the long term.

Utilities and insurance, while influenced by external market forces, should not be categorised as fully uncontrollable. The Authority's view in the draft determination was that airports, including SIA, have some ability to manage these costs through strategic procurement, competitive tendering, and investment in cost-saving initiatives. For instance, utilities can be managed by adopting energy-efficient technologies or negotiating favourable long-term agreements with providers.

Similarly, while rising insurance premiums reflect broader market trends, airports have the ability to compare quotes across providers to secure competitive rates. As such, these costs should be classified as controllable, allowing for efficiency targets to be applied.

In the draft determination, the Authority also considered that staff costs are largely within MBJAL's control, particularly with respect to recruitment, staffing levels, and operational efficiency. However, certain elements of staff costs—such as adjustments for government-mandated minimum-wage increases, social security contributions and other statutory payments—are externally determined and beyond management's discretion. To reflect this, the Authority proposed to classify staff costs as controllable, except for elements related to changes in the minimum wage, which will be treated as uncontrollable and subject to a pass-through mechanism. This approach aligns with regulatory precedent.

A full categorisation of controllable and uncontrollable cost lines is provided in Table 8.2 below.

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<sup>110</sup> Controllable costs are OPEX items over which the airport operator has influence or a considerable degree of control. Uncontrollable costs are OPEX items where, while the airport may still have some degree of influence, public policy or market factors determine the level of costs that the airport has to bear to a considerable extent.

Table 8.2 SIA OPEX categories

Expense line	
Salaries	Controllable
Repairs and Maintenance	Controllable
Janitorial	Controllable
Utilities	Controllable
CUTE Maintenance	Controllable
Marketing	Controllable
Other OPEX	Controllable
Environmental	Controllable
Insurance	Controllable
Security	Uncontrollable
Bad debt	Uncontrollable
Concession fee	Uncontrollable
Irrecoverable GCT	Uncontrollable

Source: JCAA (2025).

#### 8.4 Responses to the draft determination

MBJAL's response focussed on the classification of insurance costs, OPEX elasticities, and the treatment of security-related costs.

MBJAL questioned the Authority's classification of insurance as a controllable cost. It argued that the airport is a price-taker in the insurance market, with only a limited number of global providers able to offer the specialist cover required under the Concession Agreement. MBJAL also noted that insurance procurement is conducted through a competitive bidding process each year and that premiums are largely determined by the broader reinsurance market, which the airport cannot influence. On this basis, MBJAL requested that the Authority reconsider its decision and treat insurance as a partially or fully uncontrollable cost.

On OPEX elasticities, MBJAL acknowledged an error in the financial model submitted as part of its business plan, which resulted in OEPX elasticities not being correctly applied across relevant cost categories. The airport confirmed its acceptance of the Authority's OPEX projections as set out in the draft determination. MBJAL also requested that an elasticity of 1 be

applied to insurance and security costs, reflecting its view that these categories scale directly with passenger volumes.

MBJAL expressed support for the Authority's consideration of a mechanism to address the uncontrollable nature of security costs. In its submission, MBJAL indicated that instead of its previously proposed S-term, which could add complexity to the regulatory process, a continuation of the existing pass-through mechanism would be sufficient. MBJAL has requested that the Authority provide clear guidance on the process for consideration of a cost-pass through related to security costs incurred above forecasted levels.

## **8.5 The JCAA's final determination**

The Authority considers MBJAL's proposed OPEX for QQ3 to be broadly reasonable and recognises that increases attributed to statutory minimum wage adjustments and security costs may outweigh some of the operational efficiencies identified in areas such as utilities. As with all efficient OPEX, these costs will be recovered from customers during the course of QQ3.

The Authority has reviewed specific elements of MBJAL's cost forecasts and provides the following clarifications and updates to our position.<sup>111</sup>

### **Insurance**

In the draft determination the Authority stated that if MBJAL provided evidence to justify that insurance should be treated as partially controllable, the classification could be reconsidered. While the Authority recognises some of the points raised by MBJAL regarding the unique nature of aviation insurance, we do not consider that sufficient new evidence has been submitted to justify reclassifying insurance as a partially or fully uncontrollable cost.

### **OPEX elasticities**

MBJAL has acknowledged that its original tariff model did not correctly apply OPEX elasticities, and accepted the Authority's revised projections as set out in the draft determination (and shown in Table 8.3). However, MBJAL also requested that an elasticity of 1.0 be applied to both insurance and security though no underlying analysis or evidence was submitted as

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<sup>111</sup> Note, security costs are dealt with in section 8.5.1 below.

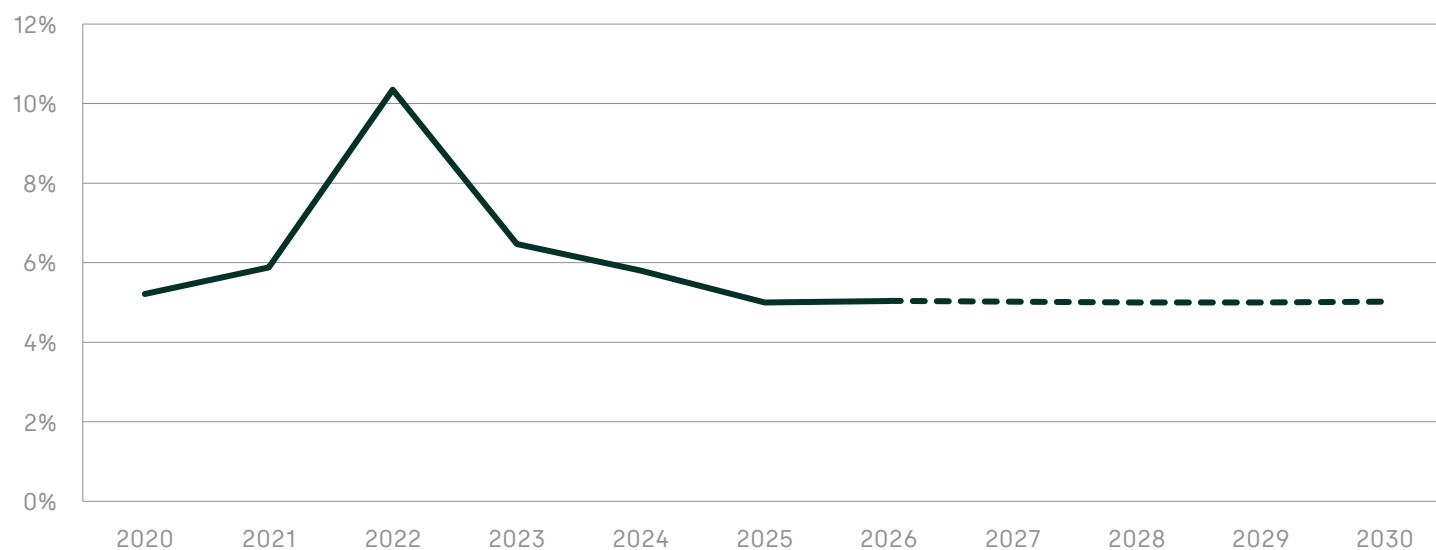
part of the consultation response. As such, the elasticities set out in the draft determination will be maintained for the final determination.

### Jamaican inflation assumption

The Authority has reviewed the inflation assumptions applied by MBJAL across its OPEX forecast. MBJAL proposed a 6% inflation rate for relevant cost categories, citing the Bank of Jamaica's inflation target range of 4–6%. While the Authority recognises this rationale, it considers that a 6% assumption is above the most likely inflation outcome across QQ3.

To ensure consistency with macroeconomic expectations and maintain forecast discipline, the Authority has revised the inflation assumption to around 5%, in line with current International Monetary Fund (IMF) projections.<sup>112</sup> This is also the midpoint of the Bank of Jamaica's inflation target range. The Authority's revised inflation rate has been applied to staff, security, janitorial, and utilities cost categories. Figure 8.4 shows historical and forecast inflation in Jamaica from 2020 to 2029.

Figure 8.4 Historic and forecast Jamaican inflation



Note: The IMF forecast stops in 2029. As a result, we have calculated the inflation rate for 2030 by taking the average inflation rate between 2026-2029.

Source: IMF (2025).

<sup>112</sup> Specifically, 5.04% in 2026, 5.02% in 2027, 5.00% in 2028, 5.00% in 2029 and 5.02% in 2030.

## Staff training costs

In addition, the Authority has reviewed MBJAL's assumptions for training cost growth. The original submission applied a 3% annual increase to training costs. This has been revised down to 2.2%, to reflect forecast US CPI over the regulatory period—consistent with the rest of our modelling assumptions.

## Security costs

The Authority has reviewed MBJAL's forecast assumptions for security costs, which include a 10% annual increase over QQ3. MBJAL stated that this uplift was intended to reflect anticipated changes to the minimum wage and associated exchange rate effects. However, the Authority considers that applying a blanket 10% year-on-year increase has not been sufficiently justified.

While the off-cycle security cost adjustment addressed an exceptional set of government-mandated changes, it was a one-off decision and should not be viewed as precedent for automatic, annual uplifts at this level.<sup>113</sup> In the absence of evidence supporting such sustained cost growth, the Authority has revised MBJAL's security cost projections to grow in line with Jamaican inflation forecasts over QQ3. This approach reflects the expectation that any further wage-driven increases should be addressed through the cost pass-through mechanism, where justified by supporting evidence.<sup>114</sup>

## Real pay adjustment

As part of its review of staff cost projections submitted by MBJAL, the Authority has maintained the 2% real pay adjustment assumption. However, an error was identified in MBJAL's modelling which applied the 2% real uplift twice, effectively resulting in a 4% real pay increase year on year. This has been corrected in the final determination to reflect a single 2% real increase in line with the Authority's position.

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<sup>113</sup> Indeed, in the Authority's off-cycle decision, we highlighted that the decision made for 2025 does not obligate the Authority to adopt the same position for the QQ3 rate review. As such, the decision made for 2025 should not be treated as precedent for the QQ3 rate review.

<sup>114</sup> Any unexpected or above-inflation increases to the minimum wage that materially impact security costs will be considered as part of the security cost pass-through mechanism, as outlined in Section 8.5.2.

### 8.5.1 Allowed OPEX over QQ3

The Authority considers MBJAL's proposed OPEX forecast to be broadly reasonable across the regulatory period. However, following further review, the Authority has made a number of adjustments in line with updated inflation assumptions, revised projections, and stakeholder feedback (as discussed above).

In particular, as mentioned above, the Authority has revised its inflation forecasts across multiple cost categories. The Authority has also made targeted reductions to certain cost lines, including training and security, where year-on-year growth rates were considered excessive or not well justified.

As a result, the final OPEX allowance for QQ3 has been revised downwards from the draft determination. The total OPEX allowance is now \$188.19 million, compared to \$197.93 in the draft determination and \$196.14 million as submitted by MBJAL. This represents a \$9.74 million decrease compared to the draft determinations (approximately \$1.95 million per annum). This is mainly driven by updated Jamaican inflation data.

The differences in total forecast OPEX for SIA for QQ3 are shown in Table 8.3 below.

**Table 8.3 Forecast OPEX (US\$ m, nominal)**

	2026	2027	2028	2029	2030
MBJAL	34.20	36.42	38.96	42.00	44.56
JCAA (DD)	34.62	36.74	39.31	42.35	44.91
JCAA (FD)	34.10	35.46	37.40	39.72	41.51

Note: Concession fees (fixed and additional) are excluded from OPEX. Security costs are included for comparative purposes.

Source: JCAA analysis.

Finally, the Authority accepts the total OPEX proposed by MBJAL for the remainder of QQ2, but has updated the 2024 and 2025 traffic to reflect the outturn data for 2024 (see section 3.4.2).

### 8.5.2 Security costs

In the draft determination, the Authority considered the introduction of a S-term to address uncontrollable security cost increases, as proposed by

MBJAL. However, following further engagement, and in line with MBJAL's response to the draft determination, the Authority has concluded that continuing with the current pass-through mechanism for security-related OPEX during QQ3 is a more proportionate approach.

This mechanism will be limited to material, unforeseen cost increases. Importantly, it is not intended to account for expected changes such as inflation, typical wage growth, or standard cost pressures that operators should factor into their forecasts. For example, anticipated increases in the national minimum wage should have been included in MBJAL's cost projections for QQ3. This mechanism will also only apply for OPEX and does not apply for CAPEX-related expenditure.<sup>115</sup>

In order for this mechanism to be implemented, airports will be required to submit information and data demonstrating that:

- the cost increase is attributable to **exogenous factors** beyond management's control (e.g. changes in security regulations, statutory employment changes, or directives from government or international bodies);
- all **reasonable steps to mitigate cost increases** were taken (e.g. cost control measures, reallocation of resources, efficiency initiatives);
- the cost variance is **clearly documented, traceable, and quantifiable**, including proposed per-passenger or total cost adjustments.

The burden of proof lies with the airport. The Authority will not perform detailed investigative work to fill in gaps in submissions. Requests that are not substantiated with clear, auditable evidence will not be considered eligible for within-period adjustments. Furthermore, the pass-through mechanism will not be applied automatically on an annual basis. Any adjustment must be explicitly requested by MBJAL (per the framework above) and supported by data and evidence.

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<sup>115</sup> This is in line with regulatory precedent from Heathrow airport.

## 9 Service quality regulation

### 9.1 Background

Service quality performance is monitored by the AAJ as part of its Concession Agreement, in order to ensure that MBJAL complies with a set of performance standards. The Authority has not historically regulated service quality at SIA, on the basis that this would impose an additional regulatory burden on airports on top of the requirements imposed by the Concession Agreement. The Concession Agreement imposes a minimum score for overall service quality performance (referred to as the quality service target (QST) average), as well as target scores for each area of service quality. If MBJAL's performance falls significantly below the level established in the Concession Agreement, this could be considered a material breach of contract.

MBJAL collects significant amounts of information about its performance which is submitted to the AAJ and the Authority. This includes comment cards—passenger-satisfaction questionnaires administered and analysed by the airports on a periodic basis—and passenger-satisfaction surveys undertaken by an external party (as required under the Concession Agreement). These look at:

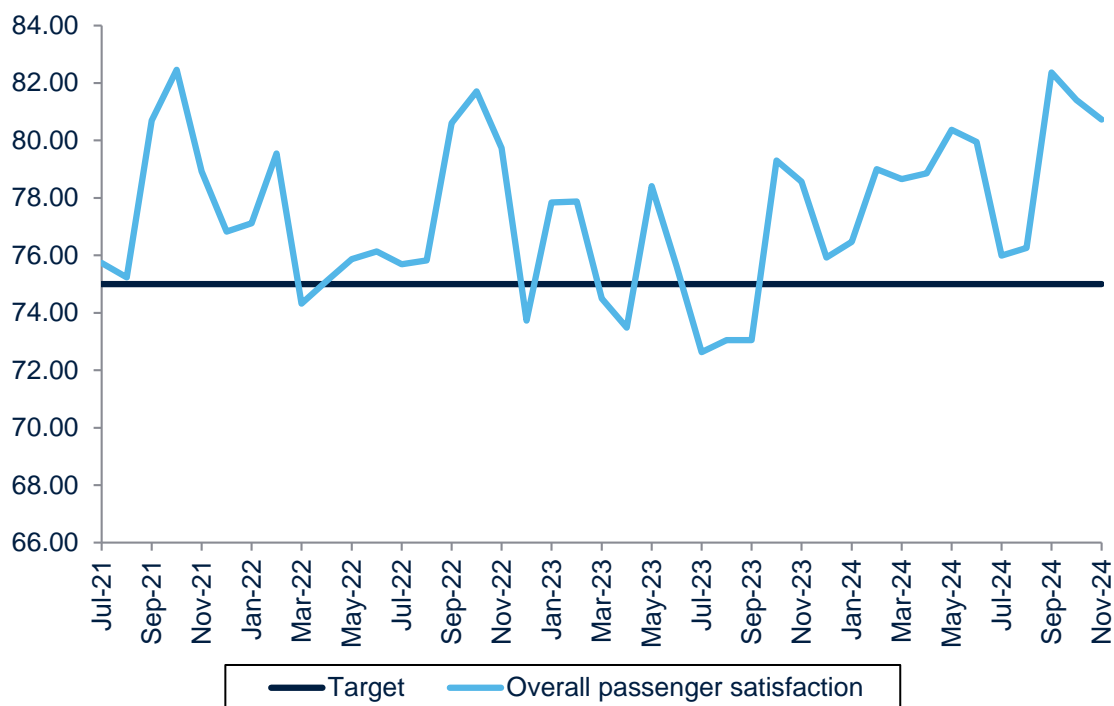
- passenger satisfaction (for example, with respect to access, quality of airport facilities, flight information, and courtesy of staff);
- baggage handling indicators (such as delivery and waiting times for luggage);
- availability and repair times for airport facilities (such as elevators and conveyors).

At the QQ2 rate review, it was determined that further service quality regulation should not be introduced as the scheme imposed by the Concession Agreement already covered a number of important indicators that affect customer experience. It was also determined that, in addition to the scheme outlined in the Concession Agreement, SIA should publish its service quality performance quarterly, to be displayed in the airport and on its website to provide some level of further monitoring and oversight.

However, service quality information was not published over the QQ2 period, which may have been due, in part, to the COVID-19 pandemic.

MBJAL has provided data on service quality performance across a number of categories from July 2021 to November 2024.<sup>116</sup> Figure 9.1 shows passenger satisfaction with SIA over QQ2, compared to the overall QST. As shown, overall satisfaction with SIA has been above the minimum threshold of 75 out of 100 set out in the Concession Agreement for the majority of the QQ2 period. However passenger satisfaction fell below this threshold in several months of the QQ2 period, including for three consecutive months in July-September 2023.

Figure 9.1 Overall passenger satisfaction at SIA

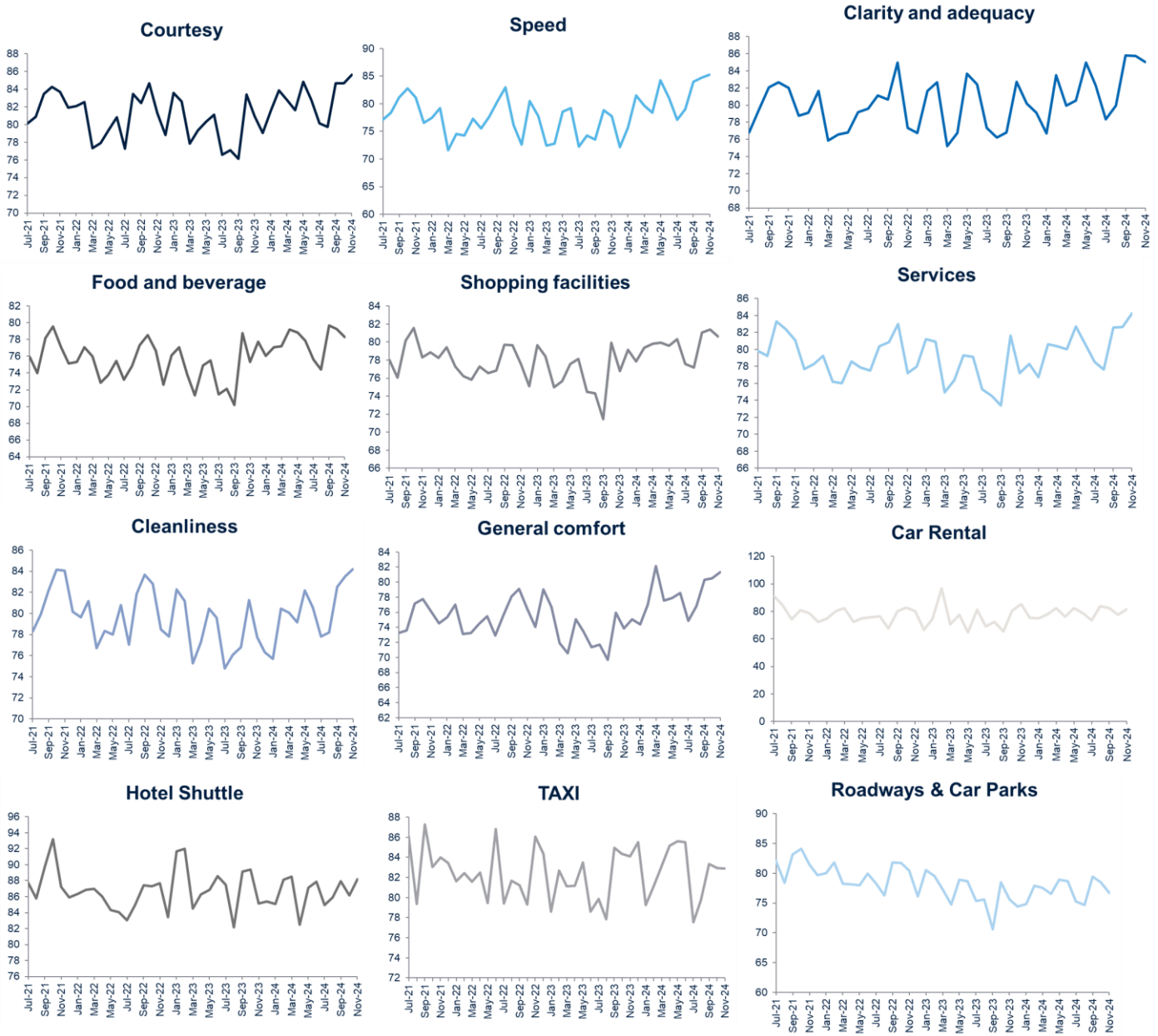


Source: JCAA analysis of MBJAL service quality data.

In addition to overall satisfaction, there are targets for 12 individual areas of service quality: courtesy, speed, clarity and adequacy, food and beverage, shopping facilities, services, cleanliness, general comfort, car rental, hotel shuttle, taxi, and roadways and car parks. Figure 9.2 shows SIA's performance in these individual categories of service quality for the QQ2 period.

<sup>116</sup> Due to the COVID-19 pandemic, data from 2020 to 2021 was not provided.

Figure 9.2 Service quality performance at SIA by category



Source: JCAA analysis of MBJAL data.

As Figure 9.2 shows, while there has been some volatility in performance across all categories, there is no discernible upwards or downwards trend in performance over QQ2.

There are five categories where service quality has not dropped below the QST for that category, or where it has dropped below the QST during only one month of the period considered. These are clarity and adequacy, food and beverage, cleanliness, hotel shuttle, and roadways and car parks. For the remaining eight categories, performance dropped below the QST in at least five separate months. There are four categories (shopping facilities,

services, car rental and taxi) where service quality performance dropped below the QST in more than ten months during the period.

For one category of service quality (car rental) the average performance across the entire period (78.2) was below the QST (82.0). The score below the QST is not driven by any one particular aspect of car rental and is due to a combination of price, service, vehicle quality and cleanliness. However, the Authority also notes that car rental has a QST of 82, which is high compared to other categories of service quality. While service quality for this category has generally been below the QST, it has nonetheless been high, averaging 78.2 over the period.

## **9.2 MBJAL's proposed approach**

MBJAL did not provide a detailed proposal on service quality in its business plan, but it has shared data with the Authority on service quality performance. MBJAL indicated that service quality has generally remained above target at SIA between 2021 and 2024. 2023 was the only year in which the overall QST was not met, but it still considers that it exceeded the target score set out in the Concession Agreement. From this, the Authority understands that MBJAL acknowledges that the overall minimum service quality threshold was not met in three months of 2023 but that it was met for 2023 overall. MBJAL has also indicated that it took the feedback received in 2023 seriously and took initiatives to improve the passenger experience, such as improving Wi-Fi access.

In response to the Authority's July 2024 consultation paper, and in its business plan submission, MBJAL indicated that it does not consider it necessary for the Authority to introduce service quality regulation for SIA. MBJAL considers that there is already sufficient monitoring of service quality in place under the Concession Agreement. Real-time feedback is also obtained through 'Happy or Not' kiosks across the airport. MBJAL also indicated that it is willing to provide greater reporting to the public—for instance, by posting overall satisfaction scores.

For these reasons, MBJAL suggested that any additional service quality regulation introduced for SIA by the Authority at the QQ3 regulatory review would add to regulatory burden and costs, with negligible benefits.

## **9.3 The JCAA's draft determination**

At the time of the draft determination, the Authority considered that, while service quality performance at SIA is generally high, there have been variations in its performance across categories, with some individual categories regularly failing to meet the QST.

The Authority also noted that some minor service quality-related issues occurred at SIA over the QQ2 period. For instance, in consultation meetings with airlines, airlines emphasised issues with the functioning of equipment such as baggage belts. However, the Authority acknowledged that MBJAL has made significant investments at SIA to improve service quality, including but not limited to terminal expansions, passenger-processing systems, and improvements to the runway and other ageing infrastructure.

Responses to the Authority's initial consultation by the FTC and IATA suggested enhancements to the current service quality measures in place at both airports. The FTC recommended financial incentives or penalties based on performance against targets and incorporating customer feedback mechanisms. IATA emphasised the need for transparency in key performance indicators and proposed refunds for unmet quality expectations and a clear link between user payments and service quality. By contrast, the AAJ considered that the existing service quality regime under the Concession Agreement is sufficient for SIA.

Given the feedback received from stakeholders, and the findings discussed above, the Authority considered that further measures could be put in place for QQ3 to ensure high service quality. This is in line with the Authority's duty under the Act to 'ensure that the airport is operated in accordance with performance standards and service levels consistent with best industry practice'. For the QQ3 period, the Authority proposed not to impose additional service quality regulation in the form of financial penalties at SIA. However, the Authority noted that such measures may be considered in future review periods if average service quality performance at SIA fails to meet the minimum QST on a consistent basis.

Additionally, the Authority considered that some reputational incentives for SIA should be put in place. These incentives are similar to those that the Authority had attempted to put in place in QQ2, whereby the airport would be required to publish its service quality performance each month in the airport and on its website. This would lead to some level of further monitoring and oversight.

#### **9.4 Responses to the draft determination**

MBJAL agreed with the Authority that financial penalties should not be imposed at SIA. MBJAL restated its position that service quality is taken seriously at SIA, and that where targets have not been met in the past, MBJAL has taken steps to rectify the issues, including improving Wi-Fi access following complaints in QQ2. MBJAL stated that the Authority's analysis showed that it has maintained high levels of service quality.

MBJAL stated that it is willing to provide greater reporting, and it supports the Authority's proposal for MBJAL to publish the aggregate satisfaction scores in the airport and on its website on a quarterly basis. MBJAL noted that publishing scores for individual elements such as security and car rental may raise confidentiality issues, but that it would continue to share disaggregated scores directly with the relevant stakeholders.

## **9.5 The JCAA's final determination**

The Authority maintains its approach to service quality put forward in the draft determination. The Authority notes MBJAL's concern that publishing satisfaction scores for individual elements may lead to confidentiality concerns, and confirms that only aggregate satisfaction scores will be required to be published.. The specific format and content of the data will be discussed further with MBJAL and included in the Annex to the Permission to Levy charges.

# 10 Final determination for the revenue yield cap

## 10.1 Revenue yield cap

MBJAL has calculated that the required yield for the first year of the QQ3 period (2026) is \$20.44 per passenger. This represents an increase of 17% on the 2025 yield of \$17.43. MBJAL then suggests that charges would increase by an inflation rate of 2.2% per annum.

In the draft determination, the Authority made changes to a number of areas in SIA's business plan, which led to a change in the overall proposed revenue yield cap. In line with MBJAL's business plan, the Authority smoothed out the revenue yields over QQ3 on the basis of CPI forecasts—see Table 10.1 below.<sup>117</sup>

Table 10.1 JCAA revenue yield cap for the draft determination (US\$ per passenger)

	2026	2027	2028	2029	2030
<b>JCAA draft determination</b>	16.86	17.26	17.69	18.10	18.51
<b>Year-on year change (JCAA)</b>	(3.2%)	2.4%	2.4%	2.4%	2.3%

Source: JCAA and MBJAL (2024), 'Tariff Model QQ3 JCAA - Revision 2', December 19.

Subsequent to the draft determination, the Authority has considered MBJAL's comments, alongside the responses from other stakeholders, and has determined revised charges as part of the final determination as set out in Table 10.2 and Figure 10.1 below. The charge per passenger is now expected to decrease by 0.3% in 2026 compared to 2025, with charges rising in line with CPI forecasts from 2027 onward.<sup>118</sup>

<sup>117</sup> The revenue yield for 2026 is set such that: (i) the revenue yields grow in line with CPI forecasts in the subsequent years of QQ3; and (ii) the resulting total revenues are equal to the allowed revenues (in present-value terms).

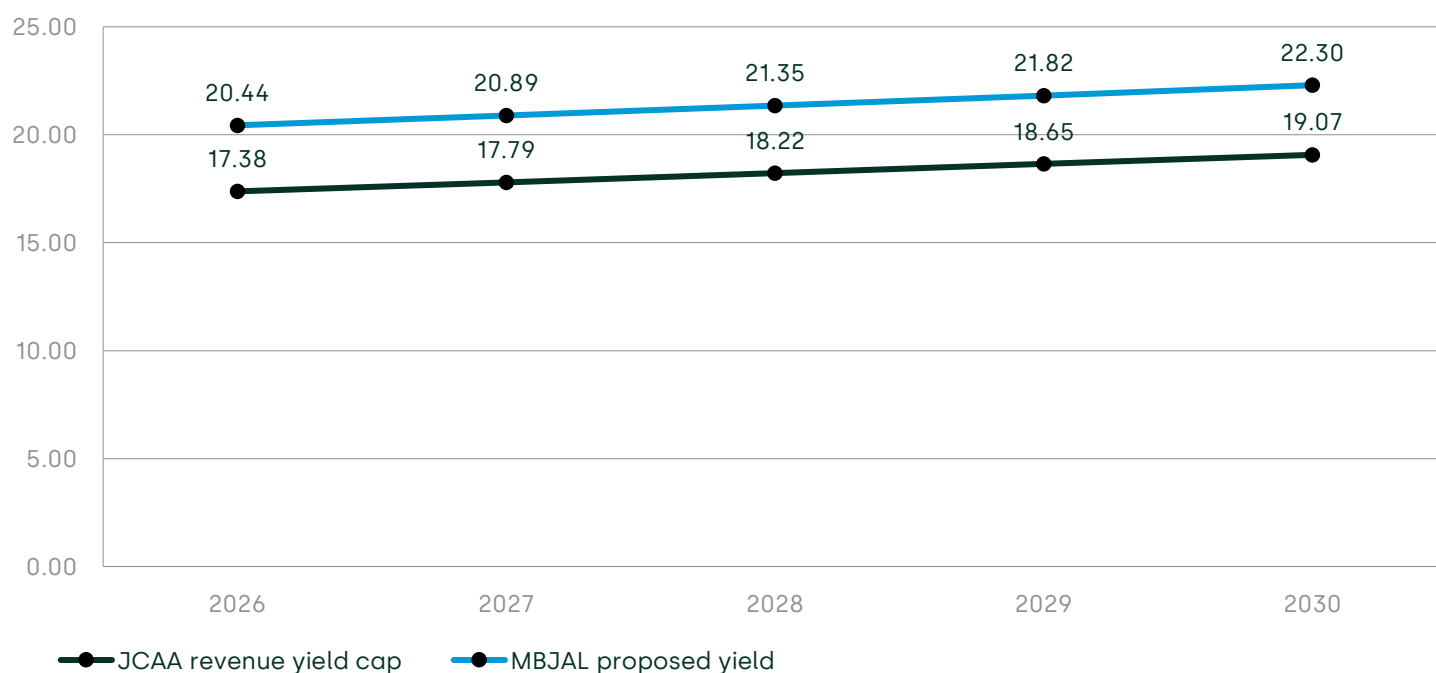
<sup>118</sup> As explained below, the Authority has updated its CPI inflation forecasts as at March 31, 2025, in line with MBJAL's request.

Table 10.2 JCAA revenue yield cap for the final determination (US\$ per passenger)

	2026	2027	2028	2029	2030
<b>JCAA final determination</b>	17.38	17.79	18.22	18.65	19.07
<b>Year-on year change (JCAA)</b>	(0.3%)	2.3%	2.4%	2.3%	2.3%

Source: JCAA and MBJAL (2024), 'Tariff Model QQ3 JCAA - Revision 2', December 19.

Figure 10.1 JCAA revenue yield cap for the final determination (US\$ per passenger)



Source: JCAA and MBJAL (2024), 'Tariff Model QQ3 JCAA', October 18.

The revenue yield cap before the concession fee is added is shown in Table 10.3.

Table 10.3 JCAA revenue yield cap per passenger excluding concession fees (US\$)

	2026	2027	2028	2029	2030
<b>JCAA final determination</b>	8.03	7.93	7.85	7.93	7.73

Source: JCAA and MBJAL (2024), 'Tariff Model QQ3 JCAA - Revision 2', December 19.

The Authority notes that more than half of the total charge (and therefore the reduction in the charge compared to MBJAL's proposal) is due to the concession fees, but that this does not directly affect the revenue that the airport is allowed.

This is a maximum cap, within which airports can choose how they set the structure of their charges. Charges will be adjusted in line with forecast rather than actual inflation.

## 10.2 Final determination – summary by area

A summary of the Authority's final determination in the different areas is set out below.

### Till regime

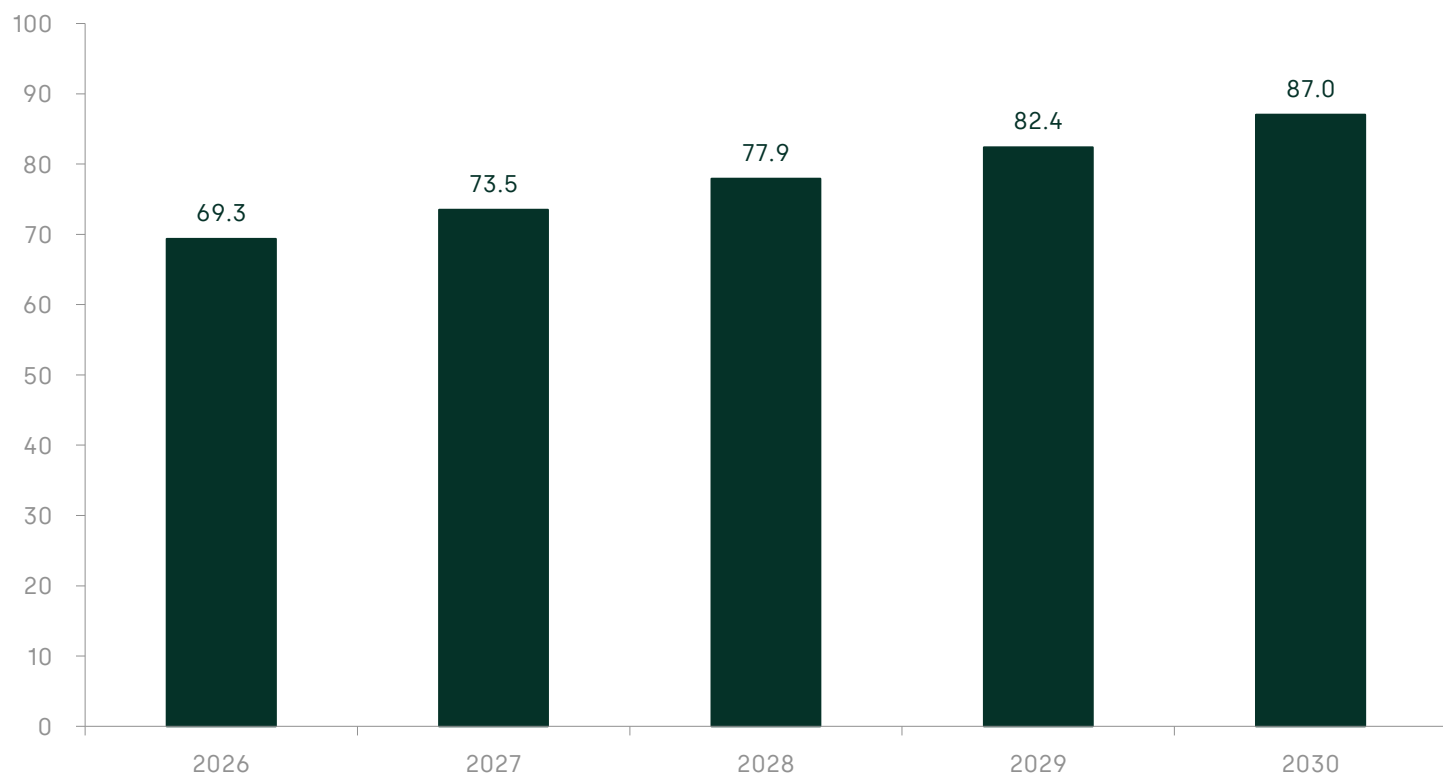
The Authority recognises that MBJAL has relatively low charges when taxes and concession fees are excluded. The Authority also notes that SIA has made significant investments in developing the airport. For these reasons, the Authority considers that it is appropriate to reduce the sharing rate from 70% to 65%. This strikes a reasonable balance between meeting the Authority's duty under the Act to further the reasonable interests of users, and recognising MBJAL's performance. The appropriate sharing rate will be revisited in future reviews.

### Commercial revenues

Real non-aeronautical revenues have increased steadily and significantly at SIA, and have outstripped passenger growth in recent years. The Authority has calculated elasticities of each category of non-aeronautical revenue to passenger growth based on the historical relationship between passenger numbers and non-aeronautical revenue, using data from QQ1 and the years of the QQ2 period that were not significantly affected by the COVID-19 pandemic (specifically 2022 and 2023). The Authority has also excluded data where certain years are unlikely to be

representative going forward. Based on this approach, the Authority obtains the commercial revenue forecasts for QQ3 as shown in Figure 10.2 below.

Figure 10.2 The Authority's total commercial revenue forecasts based on proposed elasticities (US\$m, nominal prices)



Source: JCAA analysis of MBJAL QQ3 financial model.

### Traffic

The Authority's traffic forecasts are slightly higher than its estimate in the draft determination, and are in line with the forecasts proposed by MBJAL. The traffic forecasts are summarised in the table below.

Table 10.4 Comparison of traffic forecasts – final determination

		2024	2025	2026	2027	2028	2029	2030	CAGR (QQ3)
MBJAL	Levels (m)	5.05	5.02	5.27	5.51	5.74	5.96	6.17	
	Growth		-0.6%	5.0%	4.5%	4.2%	3.9%	3.6%	4.0%
JCAA	Levels (m)	5.05	5.02	5.23	5.45	5.67	5.89	6.12	
	Growth		-0.6%	4.2%	4.2%	4.0%	3.9%	3.8%	4.0%

Source: JCAA analysis.

## Cost of capital

In line with the draft determination, the Authority has set a nominal pre-tax WACC of 15.0%. This compares with the 14.7% WACC proposed by MBJAL in its business plan.

## CAPEX

The Authority has accepted MBJAL's submitted CAPEX proposals for QQ3. CWIP has not been allowed into the RAB. The Authority notes that, compared to the draft determination, the additions to the RAB are now expected slightly earlier over QQ3 due to changes in the classification of projects.

## RAB and depreciation

The Authority uses MBJAL's proposed opening RAB for QQ3. However, in the first year of QQ3, the Authority made a downward adjustment for \$13.8m of CAPEX incurred over QQ2 but not approved by the Authority (and this CAPEX is included in the closing RAB instead).

In light of the clarifications provided by the AAJ, the Authority has revised its classification of projects as either subject to or excluded from the recoupment clause, compared to the draft determination. For assets that are not subject to the recoupment clause in the Concession Agreement, the depreciation policy is based on the residual life of the Concession Agreement, in line with MBJAL's proposal. However, the Authority has depreciated assets subject to the recoupment clause based on their useful economic lives.

## OPEX and security costs

The Authority has reviewed and adjusted MBJAL's OPEX forecast for QQ3 to ensure it reflects efficient and realistic assumptions. As a result, the Authority sets a lower allowed OPEX relative to MBJAL's forecast for QQ3.

A pass-through mechanism will remain in place for security-related OPEX, enabling the airport to request a cost adjustment if actual spend exceeds forecasts due to unforeseen and uncontrollable events.

**Table 10.5 Total forecast OPEX (US\$m nominal)**

	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>
JCAA	29.48	31.98	34.10	35.46	37.40	49.72	41.51

Note: Concession fees (fixed and additional) excluded from OPEX.  
Source: JCAA analysis.

### Service quality regulation

Service quality at SIA is monitored by the AAJ, which requires that both the overall average level of service quality and individual categories of service quality meet a certain QST. The Authority finds that service quality at SIA has generally been good over the QQ2 period, although passenger satisfaction has fallen below the overall QST for several months of the QQ2 period, including a three-month period in 2023.

The Authority notes that some stakeholders have suggested enhancements to current service quality measures in place.

Since service quality performance at SIA has generally been high, the Authority will not impose additional service quality regulation in the form of financial penalties at SIA at this time. However, such measures may be considered in future review periods if average service quality performance at SIA fails to meet the minimum QST on a consistent basis.

Additionally, the Authority confirms that the approach of requiring the publication of satisfaction scores will be continued in QQ3, however in an aggregated format. The specific format and content of the data will be discussed further with MBJAL and included in the Annex to the Permission to Levy charges.