CAA BOTSWANA
CIVIL AVIATION AUTHORITY OF BOTSWANA

Air Connectivity & Airport Infrastructure

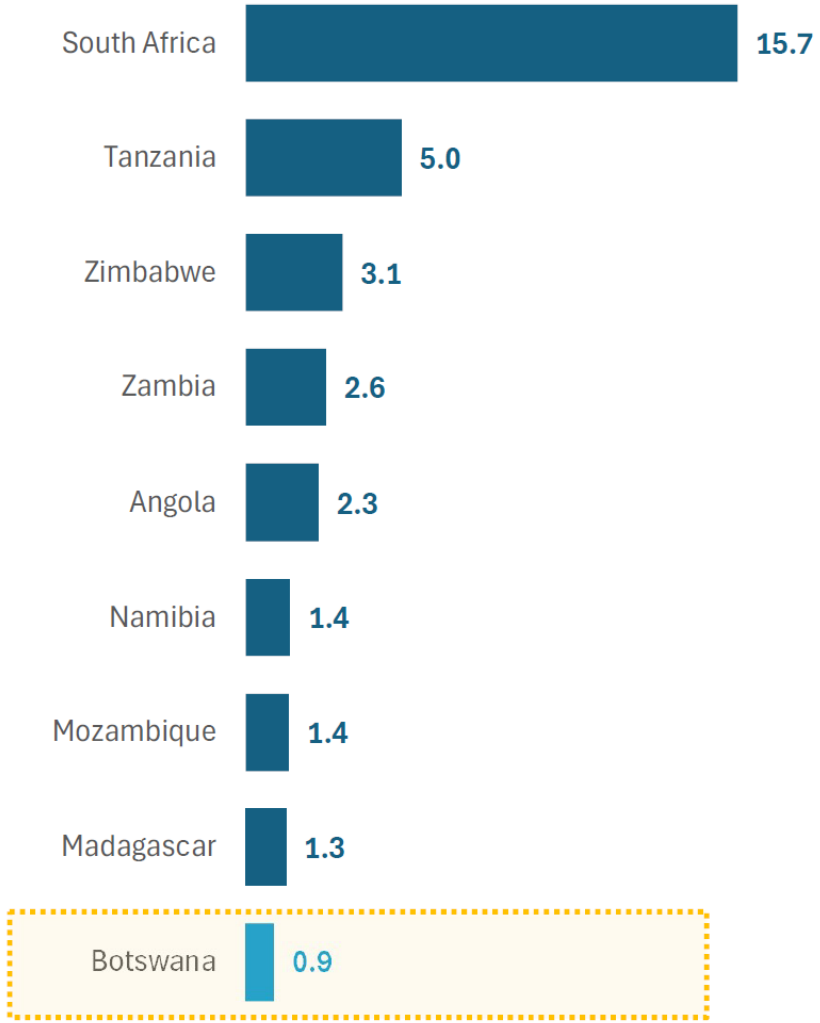
HATAB Annual Conference

24 April 2025

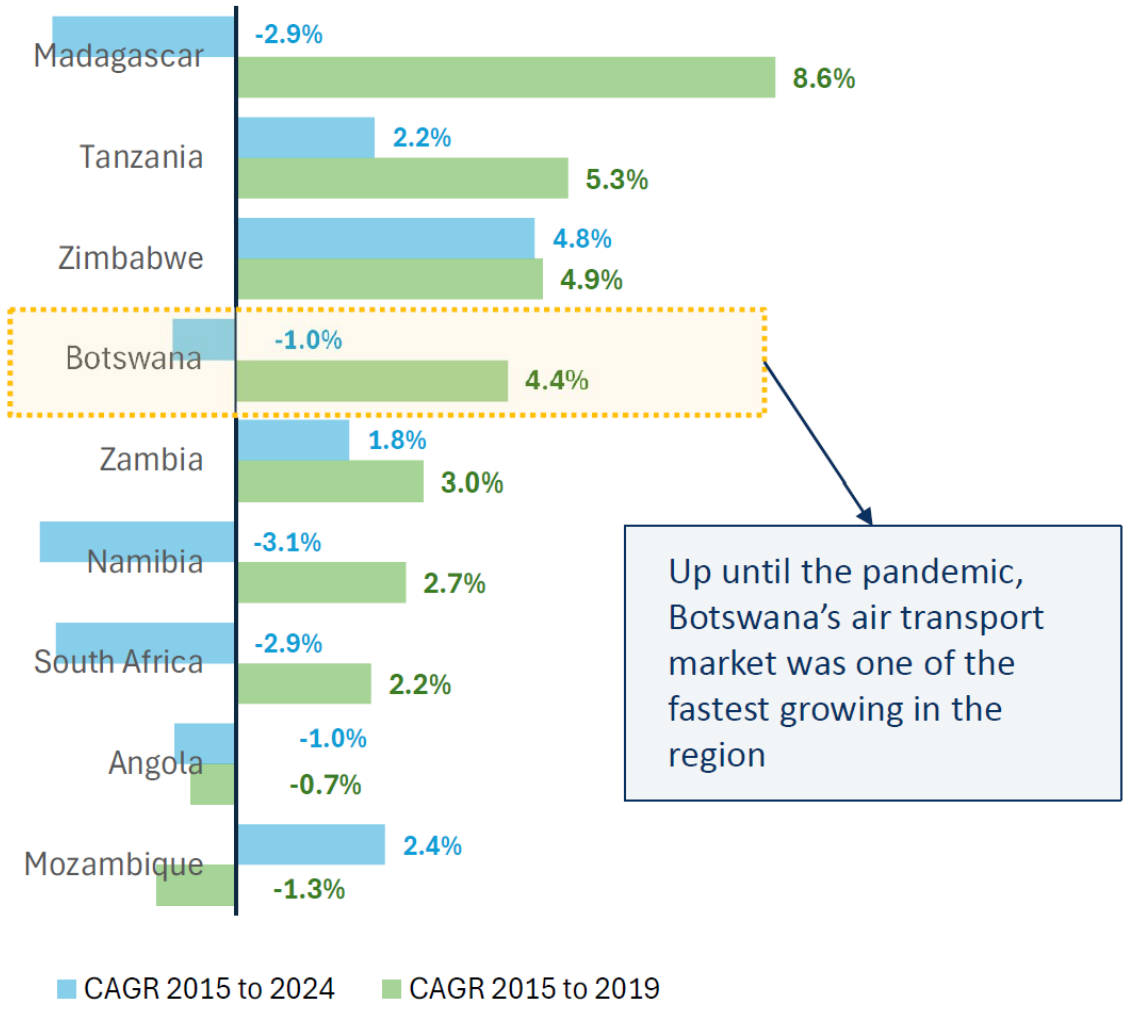
International Aircraft Seats Comparison - SADC

Financial Pre-Feasibility and Economic Benefit Assessment – The World

International offered seats by country
2024, OAG data, in millions



Growth in intl. seats by country
CAGR, OAG data



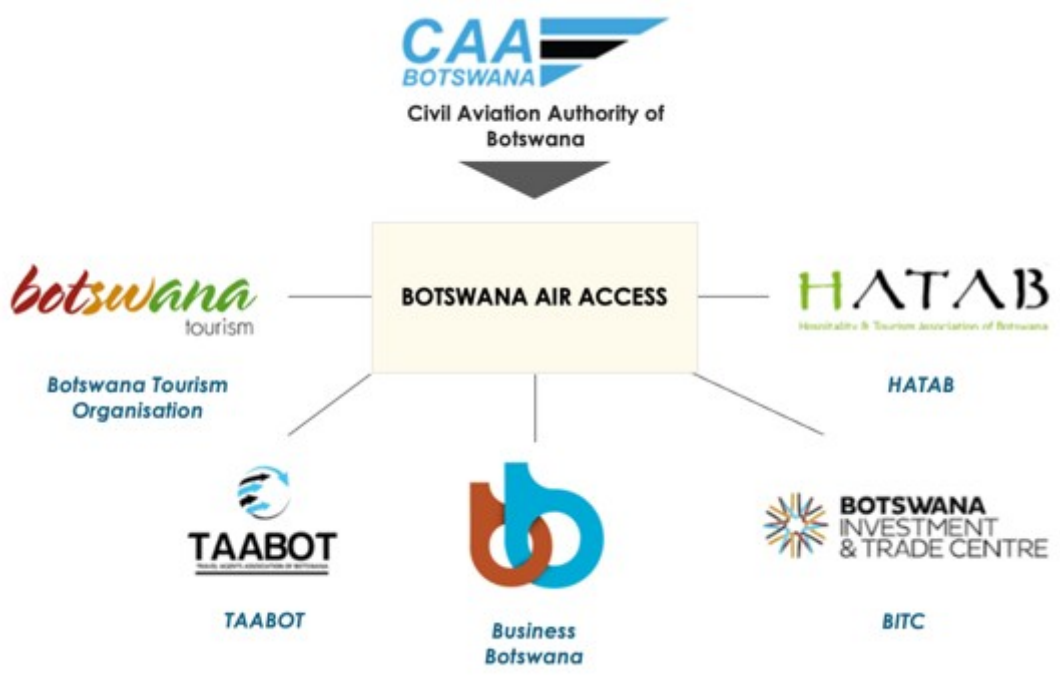
Up until the pandemic, Botswana's air transport market was one of the fastest growing in the region

Source: WB analysis, based on OAG data

Botswana Air Access

Botswana Air Access was launched by The Civil Aviation Authoiurty of Botswana (CAAB) as a collaborative public and private sector initiative on 27 August 2024. Project stakeholders include Botswana Tourism Organisation (BTO), Business Botswana (BB), Botswana Investment and Trade Centre (BITC), Travel Agents Association of Botswana (TAABOT) and the Hospitality and Tourism Association of Botswana (HATAB).

Project Structure



2024-2025 International Network Developments

Botswana Air Access ASD Pillars

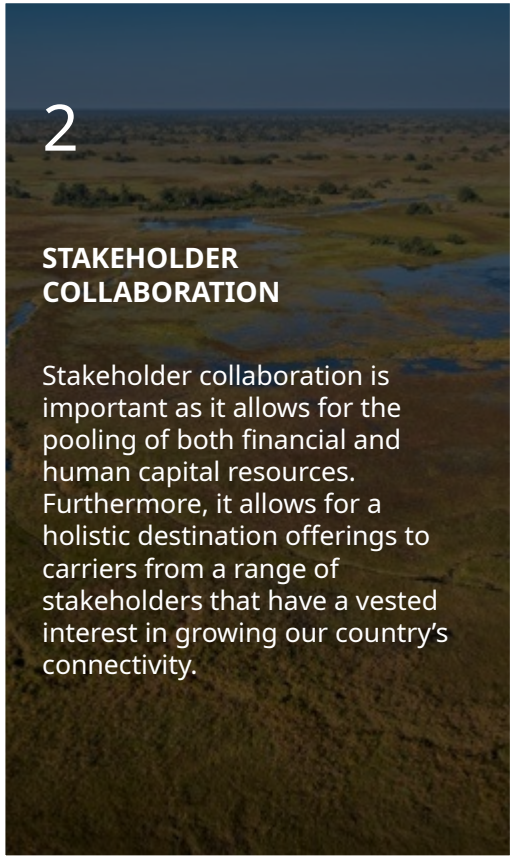
Developed around four core principles, which emphasise effective engagement with carriers and providing them with the information that improves their decision-marking processes.

BOTSWANA AIR ACCESS ASD PILLARS

1

A SINGLE POINT OF CONTACT

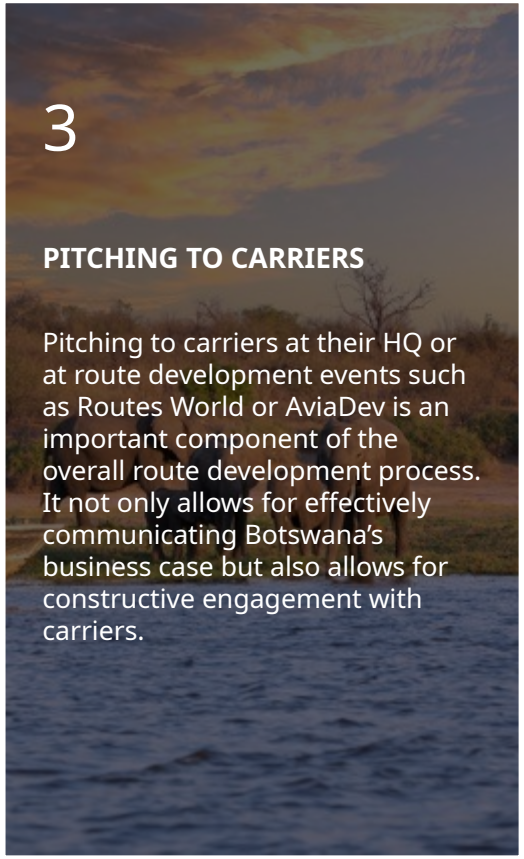
The Botswana Air Access model consists of a wide range of stakeholders across the country that can provide carriers with a single point of contact and assistance during route development activities.



2

STAKEHOLDER COLLABORATION

Stakeholder collaboration is important as it allows for the pooling of both financial and human capital resources. Furthermore, it allows for a holistic destination offerings to carriers from a range of stakeholders that have a vested interest in growing our country's connectivity.



3

PITCHING TO CARRIERS

Pitching to carriers at their HQ or at route development events such as Routes World or AviaDev is an important component of the overall route development process. It not only allows for effectively communicating Botswana's business case but also allows for constructive engagement with carriers.

4

LEVERAGE BUSINESS CASES BEYOND AVIATION

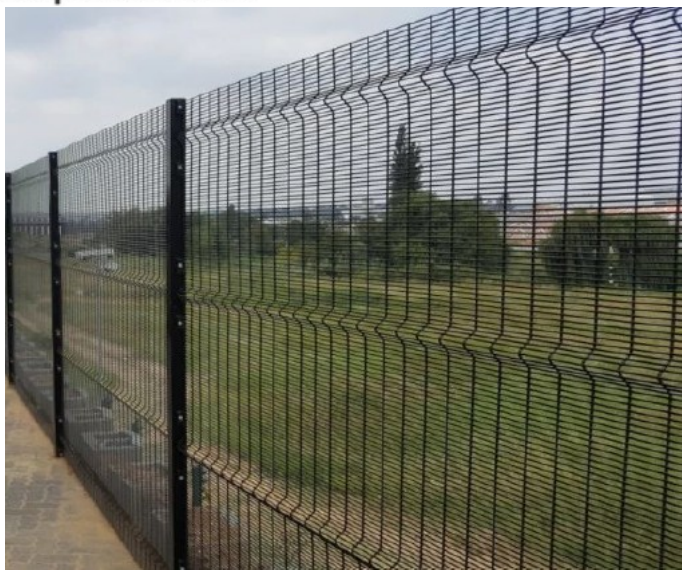
Business cases presented to carriers provides them with robust tourism, economic, aviation and investment insights into our country, which have a material effect on the success of a potential route introduction or expansion.

Airstrip Development

Airfield	Movement Areas (Airside)	Terminal Building (Landside)	Perimeter Fencing
Gumare	Design suitable surface treatment option, Surface markings etc. Review drainage structures	Propose maintenance intervention of an existing terminal building. Design Guard House at the main entrance. Review drainage structures	Propose maintenance intervention of existing fence. Propose an animal deterrent barrier around the existing fence, approved by the wildlife department.
Shakawe	Design suitable surface treatment option, Surface markings etc. Review drainage structures	Propose maintenance intervention of an existing terminal building. Design of Guard House at the main entrance Review drainage structures	Design a 2.4m high electrified fence.
Seronga	New Earthworks, Surface treatment, Surface markings etc. Design new drainage structures.	Design of a new terminal building. Design of Guard House at the main entrance Design new drainage structures	Design a 2.4m high electrified fence.
Mamuno	Design suitable surface treatment option, Surface markings etc. Review drainage structures	Design of a new terminal building. Design of Guard House at the main entrance Review drainage structures	Design 2.4m high fence, not electrified.

Perimeter Fencing

Flat Wrap Razor Wire



Runway

Terminal Building

….and Palapye

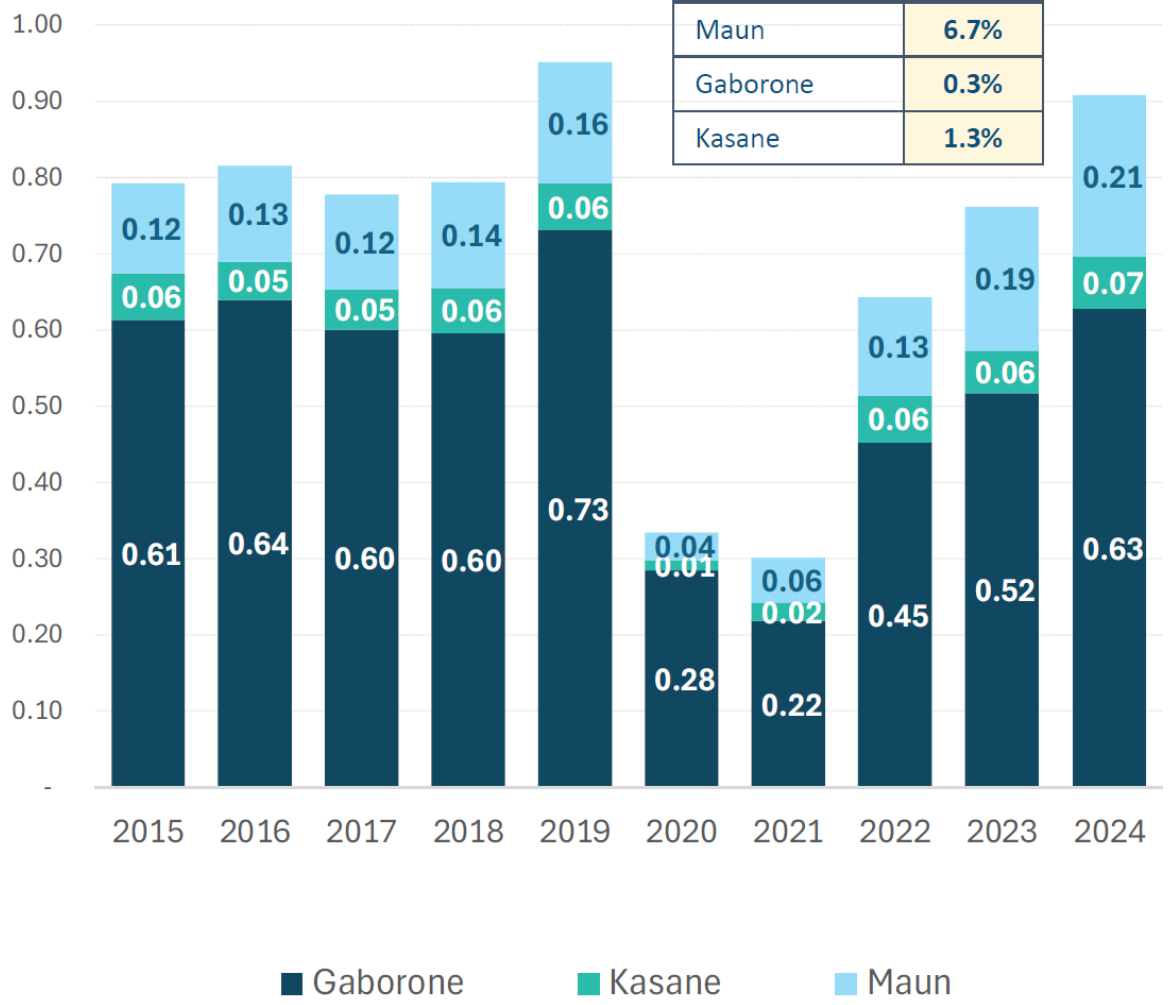
Growth Trends – International Seats

Maun has been Botswana's fastest growing airport in the past decade - CAGR of 6.7% in intl. seats between 2015 and 2024

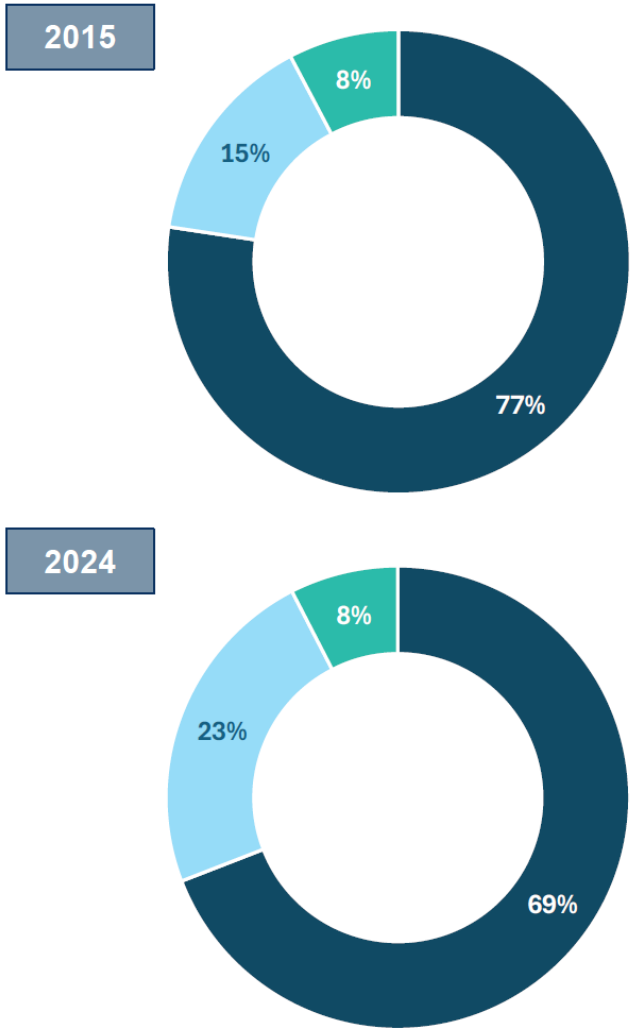
Evolution of international seats to/from Botswana by airport

2015 to 2024, OAG data, in millions

Airport	CAGR 2015-2024
Maun	6.7%
Gaborone	0.3%
Kasane	1.3%



Distribution of intl. seats by airport



Source: WB, based on OAG data

MUB Pavement Classification Rating

Concepts

- ACN (Aircraft Classification number) characterizes the aggressiveness of the aircraft on the pavement
  - Provided by the aircraft manufacturer.
- PCN (Pavement Classification number) characterizes the pavement bearing capacity. T
  - Published by the manager of the airport.

Review of the PCN

- MUB pavement classification has been PCN 44/F/A/X/T
  - Capable of accommodating up to A320/B737 type aircraft
- Updated pavement classification is PCN 60/F/A/X/T
  - Capable of accommodating up to A330 type aircraft

Potential Upgrades of MUB – World Bank Study

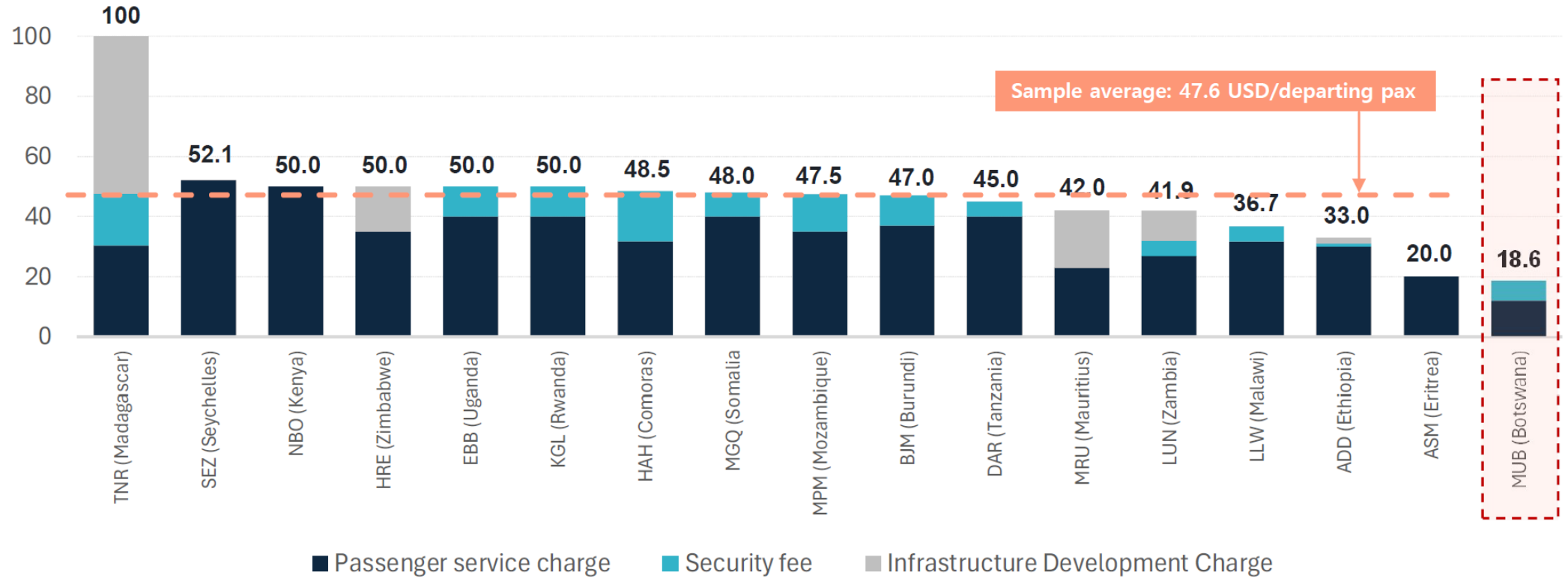
Execution of both movement area enhancement and new terminal building works (USD 102m)

Runway	• Proper dimensions (allowing the operation of any market-relevant aircraft) • Serious deficiency of structural strength • Presenting superficial pavement deterioration • **A structural strengthening of the runway is required to be able to serve larger aircraft (e.g. 787s)**
Terminal Building	• With almost 4k sqm., the existing building capacity is almost insufficient with the current volume of traffic • Facilities can barely cope with current operations (2 mid-sized aircraft with a low level of service) • **A new terminal building of 8k sqm. could be built to the west to accommodate up to 1m international passengers, leaving the current building for domestic use**
Aprons	• The main commercial apron has a bearing strength that cannot cope with aircraft larger than the 737 • The contiguous GA apron cannot cope with aircraft heavier than GA • There is not sufficient parking space to accommodate commercial aircraft • **The current commercial apron should be strengthened to be able to serve larger aircraft (e.g. 787s)** • Increasing the strength of the GA apron could allow the parking of middle size jets, vacating space at the commercial apron • Apron space should be further expanded with a greater bearing capacity to allow the operation of commercial aircraft and heavy private jets

Source: WB

Passenger Fees - Benchmark Assessment

Airport charges on pax (USD/departing passenger)



- Charges on intl. pax at MUB **are 61% below the sample average** of 16 comparable airports in Africa (USD 18.6 vs. USD 47.6 per embarked pax)
- For this reason, both the Financial and the Economic Assessments consider an **international PSC of USD 41.0**, which would bring total charges on pax at MUB to USD 47.6 (equal to the benchmarking sample average of total charges on intl. pax)

Source: WB analysis, based on information published by airports, civil aviation authorities, country AIPs and airlines' computer reservation systems

Maun International Airport Feasibility Study

- MIA represents a critical infrastructure asset with the potential to unlock the north-west region of Botswana.
- Perceived capacity limitations of the airport hinder its ability to fully contribute to regional development.
- This projects aims to assist the CAAB to reposition Maun International Airport as a strategic installation driving economic growth and development in the North-West region in a sustainable manner with the primary objective to expand and upgrade air services into Maun.

Alternate Sites

Criteria for Siting or Upgrading an Airport

Environmental Impact

- Proximity to sensitive ecosystems, wildlife habitats, and protected areas like the Okavango Delta.
- Risk of water pollution or disturbance to natural water systems.
- Noise and air pollution considerations for nearby communities and wildlife.

Economic Viability

- Cost of land acquisition and development.
- Accessibility to the main town and key economic zones.
- Future expansion potential to meet increasing air traffic.

Social Considerations

- Impact on local communities, including resettlement requirements.
- Employment generation potential during construction and operation.
- Compatibility with the local population's needs and concerns.

Technical Feasibility

- Adequacy of space for runways, terminals, and ancillary facilities.
- Compliance with international aviation standards.
- Suitability of terrain and soil for airport infrastructure.
- Controlled airspace

Accessibility and Connectivity

- Proximity to Maun town center and ease of transportation links.
- Integration with existing and planned road networks.

Existing Airport Limitations

- Capacity to handle larger aircraft and passenger numbers.
- Condition of current facilities and potential for meaningful upgrades.
- Constraints like surrounding urban development or environmental concerns.

Project at stakeholder engagement stage

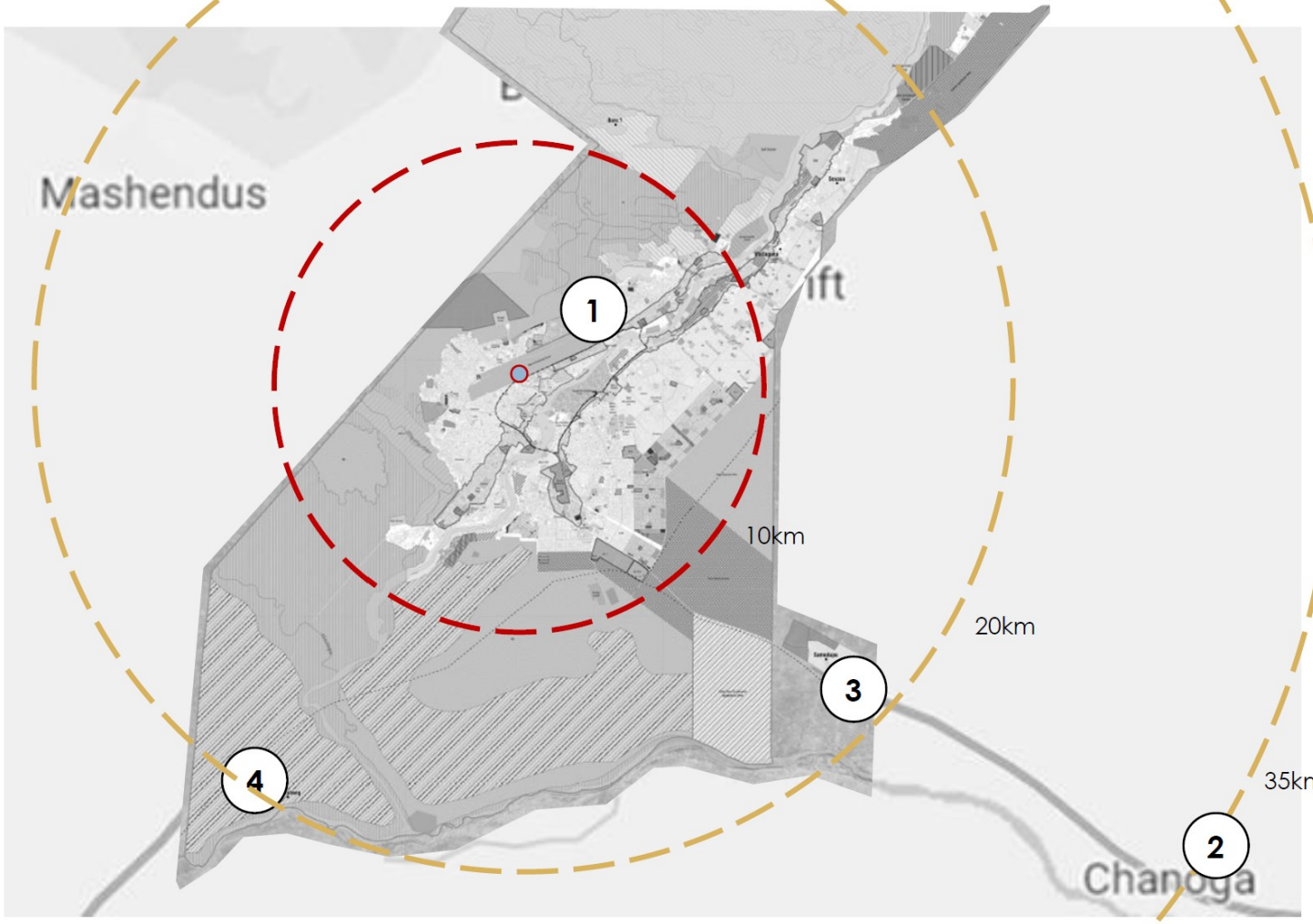
Site Assessment

ALTERNATE SITES

Economic Impacts to Consider in Relocation

Assumptions

- Expansion options north or west constrained by flood plains and high environmentally sensitive areas/
- Alternatives considered:
  - (1) MIA (Current Site)
  - (2) Chanoga – 35km east
  - (3) Samedupe – 18km east
  - (4) Tsanekona – 18km south
  - (5) Hybrid – MIA and an alternate



Thank you...