



Tracks to Prosperity: Realising the vision for the South Africa-Botswana Rail Corridor

April 2026 | Edition 2

Anura Partners

Key insights

1

A lifeline for Botswana and an opportunity for the Southern African Development Community (SADC)

The Botswana-South Africa Rail Corridor will extend from the mines via the Mmamabula-Lephalale link through the North Corridor to Richards Bay, with its multiple ports and terminals. It is the most viable corridor for Botswana and one of the most attractive on the continent. It will provide the most cost-effective route to export minerals out of Botswana and to import general freight into the country. It will unlock Botswana's mineral potential, support South Africa's bulk commodity export needs, and bolster regional trade connectivity, reaching Zambia and the Democratic Republic of Congo (DRC) along the North-South Corridor.

2

Economic impact beyond USD 40 billion

This corridor can potentially create over USD 2.4 billion in export value per year for freight alone. Over the modelled lifetime of this corridor, from 2025 to 2050, incorporating a ramp-up, the total gross opportunity is USD >40 billion. This excludes the added benefits that will be realised by attracting new value chains. Aligned with the objectives of the African Continental Free Trade Area (AfCFTA), the corridor will represent significant progress towards regional economic integration and social benefits through job creation.

3

Triple win for state-owned rail operators, freight owners, and governments

All stakeholders will win. Governments and the people of both countries will benefit from increased tax revenues, more jobs, safer roads, and strengthened trade relations. Logistical bottlenecks will no longer constrain mines and freight owners. Therefore, they will increase production and unlock new mining developments. Botswana Railways and Transnet will increase their revenue due to increased raiiling capacity and access fees for infrastructure usage.

4

Close collaboration between SOCs and freight owners is a prerequisite to enabling pragmatic implementation

Transnet and Botswana Railways, as infrastructure owners and operators, share their ultimate interests with freight owners. Both sides aspire to increase freight on rail as soon as possible. To achieve this shared goal, they need to collaborate more closely to accelerate the implementation process and overcome challenges that arise throughout. Examples of such collaboration, include but are not limited to, convening regular round table discussions, conducting a joint feasibility study, compiling project funding, and selecting study and implementation partners through joint RFPs.

5

South Africa's energy security is dependent on the corridor

Despite a notable increase in renewable contributions, Botswana and South Africa, as well as other emerging economies, are highly dependent on coal for their energy security. South Africa expects a shift in coal production volumes as Mpumalanga coal mines near their end-of-life. However, the coal fields in Botswana and the Waterberg at the beginning of the corridor have a life-of-mine of more than 30 years. With this shift, Eskom, the South African power utility, will eventually require coal from Botswana and the Waterberg to be transported to the power plants via rail to provide energy security to South Africa.

6

The corridor is underwritten by bulk commodities

Bulk commodities provide a strong business case for the corridor. Botswana imports and exports relevant volumes of copper, iron ore, manganese, soda ash, sand, petroleum, and agricultural and containerised freight. Ideally, corridor usage will be in both directions, opening the possibility of imports of petroleum and containers into Botswana. The Botswana-South Africa Rail Corridor can be expanded to Zambia and linked into the DRC through the Kazungula Bridge, which is designed to accommodate rail. Therefore, the corridor will potentially open another artery for minerals required for the energy transition.

7

An investment of USD ~2.7 billion is required to realise this corridor

The Botswana-South Africa Rail Corridor requires USD ~2.7 billion to facilitate the intended 24 mtpa. The total infrastructure investment required between 2025 and 2030 is USD ~990 million. This is divided between the Botswana rail infrastructure (USD ~90 million), constructing the link (USD ~230 million), and the North Corridor upgrades (USD ~670 million). There is subsequent infrastructure investment required between 2030 and 2035 of USD ~830 million on the South African North Corridor rail network. To facilitate the additional capacity of the rail infrastructure, USD ~860 million is required to acquire the necessary additional rolling stock between 2025 and 2030.

8

The private sector must play a leading role in attracting the funding

To unlock 24 mtpa on the corridor, significant investments in the greenfield link, brownfield upgrades and new or reconditioned rolling stock are required. Considering the financial constraints of both national rail operators, the funding will need to come from developmental and private funders. To substantiate a business case, funders must believe in the incremental volumes the investment will unlock. Open access allows multiple train operating companies on the corridor from pit to port, and infrastructure management (upgrades, maintenance, and operations) in collaboration with the public and private sectors will build confidence. Considering the history and current constraints of the state-owned rail companies, funders will require the private sector to lead a private sector participation rail solution to accelerate timelines.

A scenic view of a large steel arch bridge spanning a river with rapids. A rainbow is visible in the water. The bridge is a prominent feature, arching over the river. The surrounding landscape is lush and green, with steep banks. The sky is clear and blue.

Executive summary

Despite its resource wealth, Africa has yet to truly harness and benefit from its economic potential, due to a lack of investment in transport infrastructure – specifically on cross-border rail corridors, which are critical for mineral exports and localising value chains. Over the past decade, major African railway corridors have undergone significant upgrades, including the 2014 rehabilitation of the Lobito Corridor, the 2016 expansion of the Nacala Corridor, the 2011–2018 construction of the Addis Ababa-Djibouti line, and the early 2010s improvements to TAZARA, Ressano Garcia, and North-South rail lines.

This report examines the Botswana-South Africa Rail Corridor underpinned by the Mmamabula-Lephalale link, a pivotal infrastructure project that, when realised, will promote regional trade, enhance connectivity, and be pivotal to unlocking Botswana's mineral wealth while supporting South Africa's bulk commodity export capabilities

With the implementation of the AfCFTA,⁷ efficient and well-operated rail corridors to evacuate minerals to ports have become increasingly relevant. Across the continent, dozens of cross-border railway projects are in various stages of development. Some are under realistic planning, while others remain aspirational. These projects connect inland mineral-rich regions to international markets, driving economic growth by increasing mineral exports and unlocking new mining activities. As global demand for critical minerals rises, Africa's strategic position becomes more apparent.

The Botswana-South Africa Rail Corridor is one of the continent's most viable and efficient routes. From Botswana's Mmamabula bulk commodity fields to South Africa's rail network at Lephalale, the corridor aims to transport 24 million tonnes of freight annually, underwritten by bulk commodity. It also serves as the most efficient export line considering the length of the corridor, required greenfield developments, and the option to connect to an existing heavy-haul line and port infrastructure route for a range of minerals, thereby supporting regional competitiveness. This initiative is essential for meeting South Africa's growing energy needs as Mpumalanga's coal reserves decline, while facilitating freight and petroleum imports and diversified mineral exports.

The corridor offers significant benefits to multiple stakeholders:

1. Governments will unlock economic growth, benefit from increased tax revenues, reduced road usage and thus maintenance costs, and strengthened trade relations.
2. Communities along the corridor will benefit from job creation during construction, railway operations, and expanded mining activities. Entrepreneurs will gain access to new opportunities driven by increased economic activity. The corridor promises higher freight volumes and increased revenues for national rail operators such as Transnet and Botswana Railways, which can be reinvested into much-needed modernisation efforts.
3. Reduced logistical bottlenecks will benefit freight owners and mining companies, enabling the expansion of existing operations and the development of new projects. This is particularly critical in South Africa, where challenges and infrastructure limitations on the railway network currently restrict mining output and exports. The corridor will also stabilise and grow South Africa's Waterberg bulk commodities exports, while supporting broader industrial and mining activities in Botswana and facilitating increased imports.

⁷ *Operational Phase of The African Continental Free Trade Area Launched, African Union, 18 October 2024*

⁸ *Botswana Rail Link EOI Briefing Presentation, Transnet and Botswana Rail, 21 July 2023*

For example, between 2019 and Q3 2022, Nacala Logistics raised USD 540 million in taxes and concession fees, illustrating the transformative impact such projects can have on public finances.

To realise the corridor's potential, several infrastructure challenges must first be addressed. An estimated USD 2.7 billion investment is needed to construct new rail links, upgrade existing infrastructure, and procure ~90 locomotives and 3,000 wagons. Infrastructure degradation caused by theft, vandalism, and ageing systems must be tackled to ensure operational efficiency. The port infrastructure needs to accommodate the export volumes, and the Multi-Purpose Terminal and the Dry Bulk Terminal at Richards Bay will need strategic upgrades to increase freight volumes. In addition, the North Corridor needs to be restored to its historical capacity of 77 million tonnes per annum, which will require USD 670 million over five years.⁹

Case studies from other African rail corridors offer valuable lessons. The Nacala Corridor demonstrated the importance of securing anchor freight volumes while diversifying cargo to include bulk commodities. The Lobito Corridor showcased how private concessions can modernise infrastructure and increase operational efficiency. The TAZARA Corridor emphasised the benefits of open-access frameworks, promoting competition and boosting freight volumes. These examples provide inspiration for implementing the Botswana-South Africa Rail Corridor. Based on these case studies, we identified the minimum requirements and success factors for a corridor project.

The five minimum requirements are:

- 1) The corridor must be the most efficient route, with a length that can compete with road logistics and realistic construction costs.
- 2) The business case must align with the freight profile and be based on an anchor mineral that provides sufficient volumes to secure a return on investments.

- 3) Sufficient funding must be secured from multiple sources to cover the railway line, port, and rolling stock requirements as part of one project.
- 4) A cross-border corridor agreement must be signed between the respective governments for any corridor across multiple countries.
- 5) Sufficient rolling stock and train operating capacity must be secured through existing state-owned entities and new privately funded ones.

The five supporting success factors for a railway corridor are:

- 1) The location of mineral production needs to allow for an efficient transportation process, which considers density, similarity of the mineral, and the place of loading and discharge. If not, the consolidation or reloading of freight will cause delays.
- 2) Coordinating the process to plan and develop the corridor is essential and should ideally be facilitated by a private sector entity with the necessary expertise and experience.
- 3) The corridor will require the support of multiple funders, which will require an investment case that projects a positive return on investment to attract investors with a purely financial interest.
- 4) The sustainability of the corridor requires a sustainable mix of minerals and opportunities for both exports and imports.
- 5) In addition to exports, opportunities for imports are essential to increase the utilisation of the corridor.

In addition, the operating model is essential, and the evaluated case studies highlight three possible operating models for the Botswana-South Africa Rail Corridor.

Successful corridors comprising railway infrastructure, train operations, and ports are either solely public projects, private concessions, or PPPs in the form of open access or a consortium or similar structure with a concession.

Considering the required investments into infrastructure, rolling stock, Transnet's USD 9 billion debt, and limited reinvestment capacity, the corridor cannot succeed as a solely public project. A private concession is unlikely as the governments of both countries are actively involved in developing the corridor. Consequently, a PPP can unlock the full potential of the corridor. In addition, lessons from TAZARA and other corridors highlight the value of involving private operators to bridge capacity gaps while maintaining effective public oversight. South Africa's National Rail Policy (2022)¹⁰ and Network Statement¹¹ (2024) further support the transition to open access, encouraging PSP and addressing funding and operational challenges.

⁹ Fikile Mbalula, former South African Minister of Transport, on the launch of the White Paper on National Rail Policy, South African Government, 9 May 2022

¹⁰ White Paper on the National Rail Policy March 2022, South African Government, 12 May 2022

¹¹ Network Statement, Transnet Rail Infrastructure Manager, 19 December 2024

Two options involve the private sector in the corridor's development:

1. One option is a specifically established public-private entity taking on the concession, as demonstrated by the Lobito Corridor and the Nacala Corridor. Such an entity can mobilise the necessary funds for infrastructure and rolling stock while maintaining operational efficiency and accountability by building on existing structures.
2. Another option is an open-access solution, such as those involving private operators like Calabash Freight in TAZARA with a public infrastructure manager, which provides an opportunity to bridge capacity gaps and ensures operational continuity.

Stakeholder engagement will play a pivotal role in the corridor's success. Early collaboration with freight owners, including mining companies, will secure investments and long-term commitments. Lessons from the Lobito and Nacala corridors demonstrate how private stakeholders can underwrite projects while ensuring capacity utilisation.

Momentum for the project has grown since June 2023, when Botswana Railways and Transnet issued an RFI/EOI¹² for the Mmamabula-Lephalale link.

The Botswana-South Africa Rail Corridor's economic and social impact hinges on two critical factors: the successful implementation of railway infrastructure and the maximisation of transported volumes.

The indirect employment creation for railway projects is estimated to be more than double the number of jobs required for construction. For instance, the Nacala Corridor created over 10,000 jobs (both direct and indirect).¹³ Similar outcomes can be expected along the Botswana-South Africa Rail Corridor, which has the potential to generate long-term economic benefits for communities and governments.

This project is not just about infrastructure development. It is the starting point to secure Southern Africa's position in global supply chains. By enabling efficient freight movement, the Botswana-South Africa Rail Corridor will promote regional trade and integration under AfCFTA.

It will connect inland mining regions to international markets and foster sustainable development by reducing environmental impacts by shifting from road to rail. With immediate and coordinated action, this historic project can deliver lasting prosperity for Botswana, South Africa, and the broader Southern African region.

¹² *Funding and Development of the Proposed New Railway Corridor RFI/EOI, Transnet and Botswana Railway, 14 July 2023*

¹³ *An evaluation of employment creation and skills transfer during the delivery of capital projects in Sub-Saharan Africa: a focus on three selected case studies, University of the Witwatersrand, March 2017*



About us

Anura Partners is an international strategy consulting firm that is committed to empowering clients in Africa and Europe to build extraordinary businesses. We specialise in mining and logistics, with a strong focus on rail transport optimisation, and leverage our expertise to drive efficiency and innovation in the sector. We believe in empowering our clients to independently drive improvements, even long after our engagement has taken place. We focus on long-term success and support our clients with our entrepreneurial mindset to build resilient businesses to become leaders in their industry. Anura Partners' strategies have helped clients unlock logistics solutions and increase revenue. Our leadership team combines more than 60 years of consulting, corporate, and entrepreneurship experience at leading strategy consulting houses, as well as globally recognised brands.

www.anura.partners

About the author

This report was originally authored by Dr. Maximilian Matschke, Juliane Hoss, and Marlynie Moodley, and has been updated in this second edition.



Max is the Founder and Managing Partner at Anura Partners and leads the mining and logistics practice. He started his consulting career more than 15 years ago.

He was a consultant in McKinsey & Company's German office, focussing on strategy, organisation, and sales across geographies. Before Anura Partners, he founded and chaired several pro-bono ventures. He holds a PhD in scenario planning, a master's in business and mechanical engineering, and an honours degree in technology management.

Dr. Maximilian Matschke



www.anura.partners