



Trade and Investment KZN Exporters Master Class

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Executive: SARS and Other Government Agencies
Southern African Association of Freight Forwarders NPC (SAAFF)

2024/11/12

11h30am to 12h30pm



EXCELLENCE IN THE SUPPLY CHAIN

‘SA Inc. is on the right path’

Public Private
Consultative
Collaborative

Shared
Infrastructure -
SHARED
RESPONSIBILITY

FREIGHT
VILLAGES in
a MULTIMODAL
STRUCTURE

COLLABORATION IS THE KEY

Data Analytics

work with a scientific approach

Conducive for SA

Smart Solution for SA Inc.

Multiple stakeholders

Navigate through Multiple layers of complexity

Maturity in working collaboratively:

Public and Private sectors

Responsibility,
build to last in sustainability and logic

ON THE RIGHT PATH

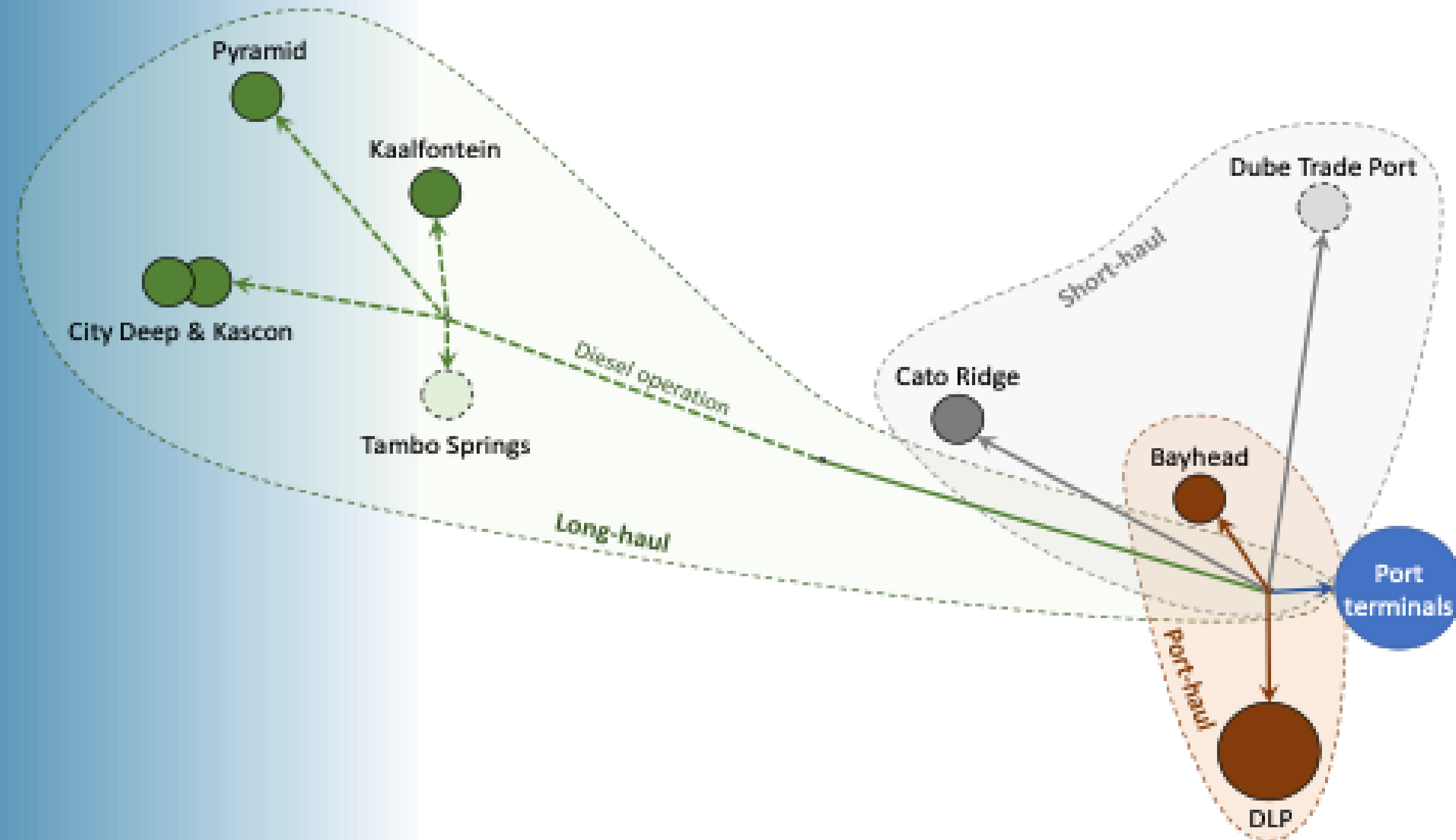


ON THE RIGHT PATH

"A Smart Transportation System that provides a Gateway to Integrated Development and Sustainable Mobility"
- the vision statement of the KZN DOT's Provincial Transport Masterplan 2045.

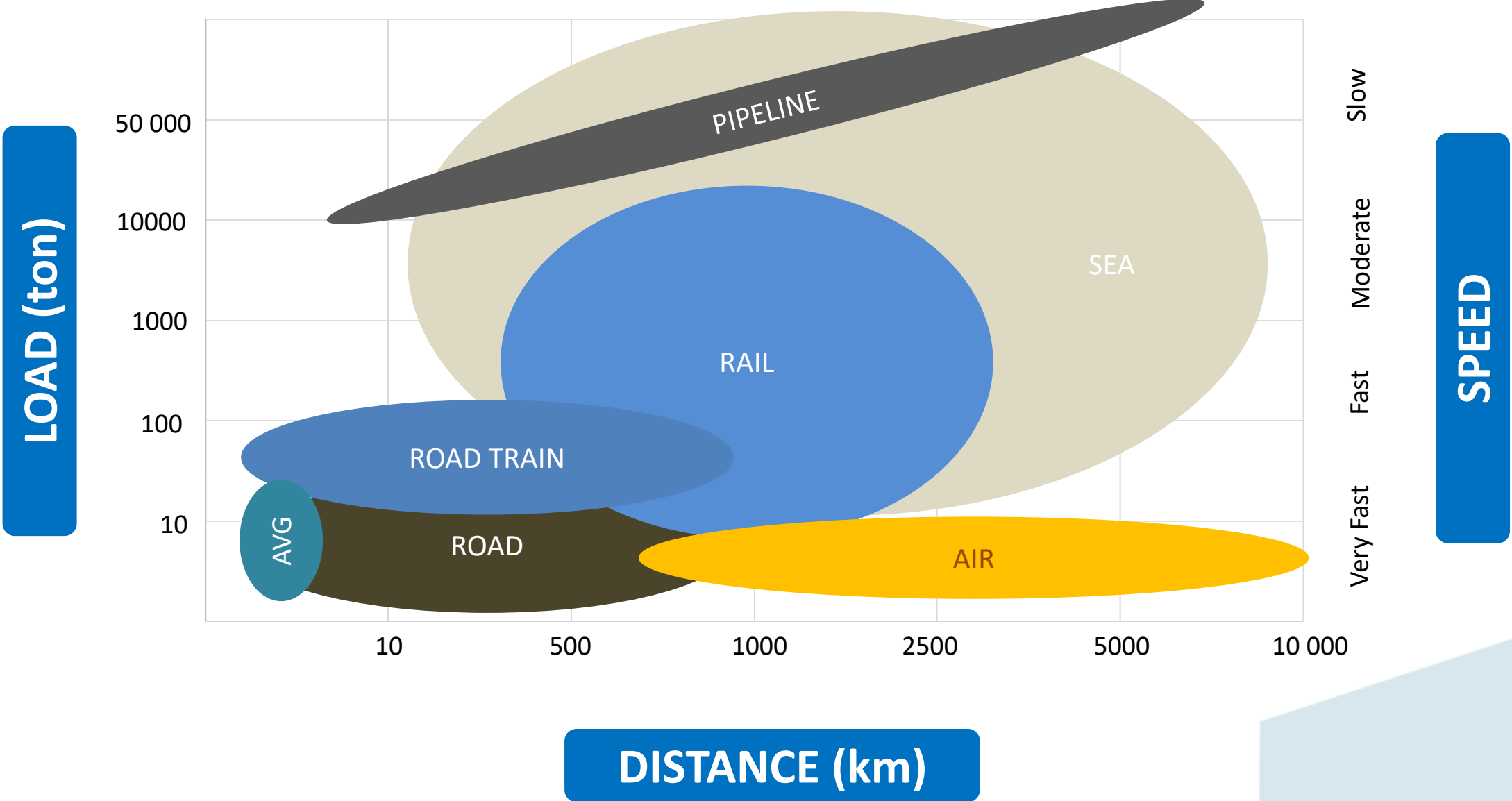
"Overview of rail services" for the Container Corridor, showing Cato Ridge as part of the Short Haul Services:

It is said that, in evaluating the container Corridor's status quo performance and developing the proposed future configuration, several categories for PSP opportunities have been identified.



MODALITIES IN THE SUPPLY CHAIN

LOAD | DISTANCE | SPEED | RELATIONSHIP



❖ *Road transport remains the primary mode in Africa: (~80% of trade in volume)*

Source: Adapted from Schoeman (2015: 131) Revised, 2022

LOGISTIC SYSTEM,

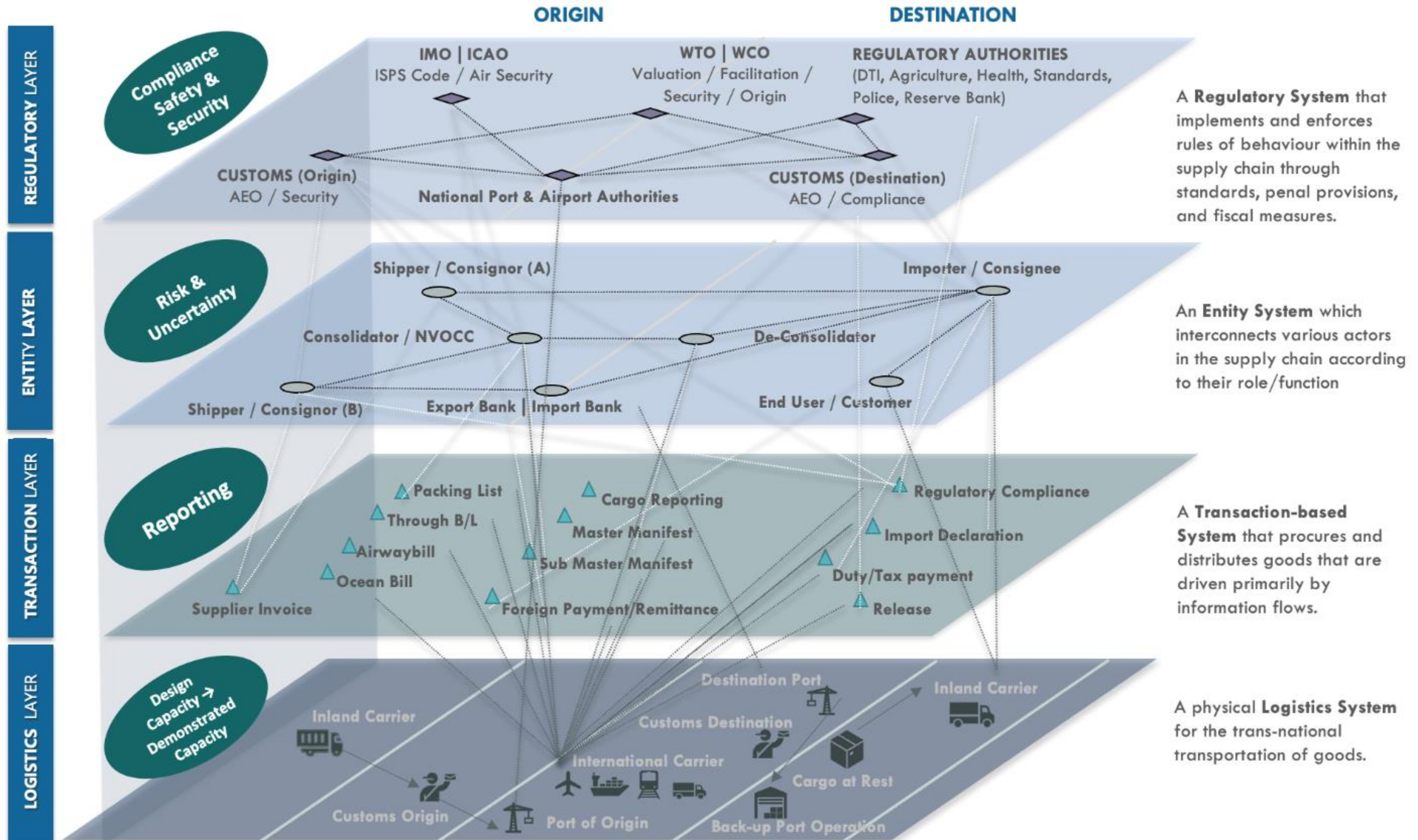
TRANSACTION RISK, ENTITY RISK AND REGULATORY NEED TO WORK IN A COHESIVE APPROACH

HOLISTIC VIEW:

Inter-dependencies: Shared Infrastructure & Shared Responsibility. There needs to be Accountability concerning Transparent KPI Structures, with Real-Time Monitoring of Best Practices, Unlocking the Demonstrated Capacity to Support Trade & Trade Growth.

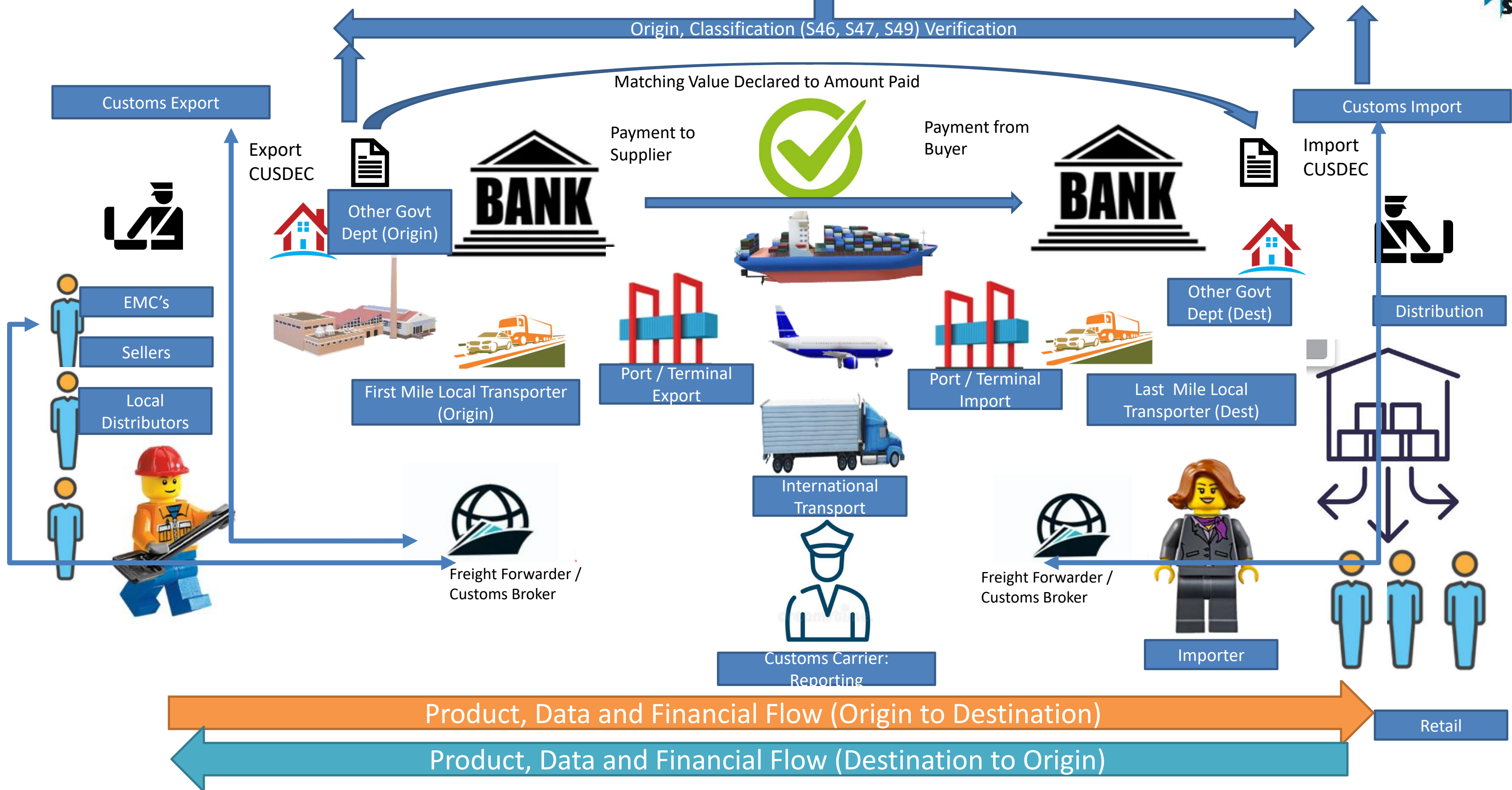
THE LOGISTICS NETWORK IS THE CORE OF ANY SUPPLY CHAIN:

1. Time
2. Cost
3. Service Reliability



"The Supply Chain is the continuous linking of activities that take place for the systematic movement of goods from place of origin to the place of final destination" WCO

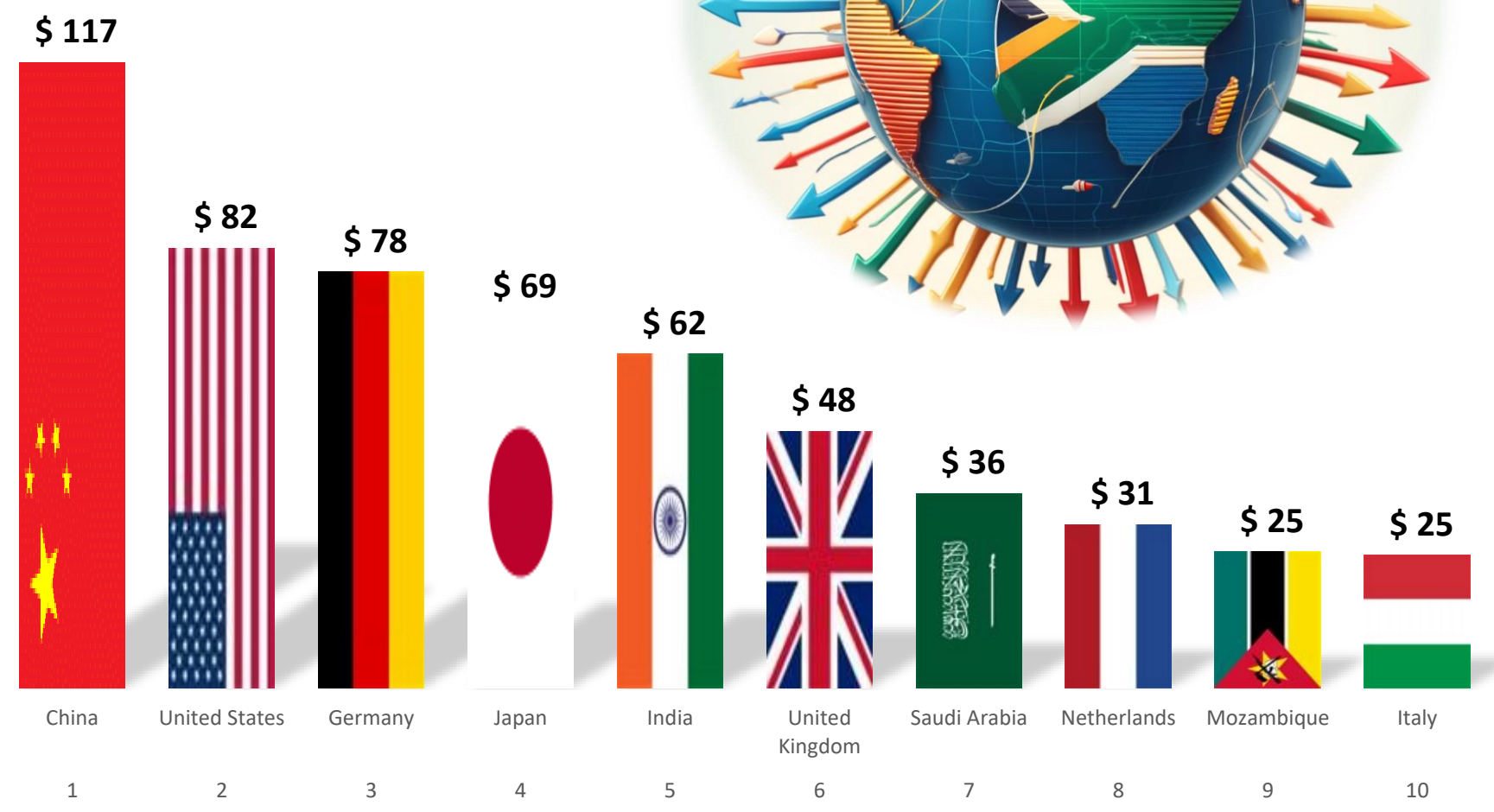
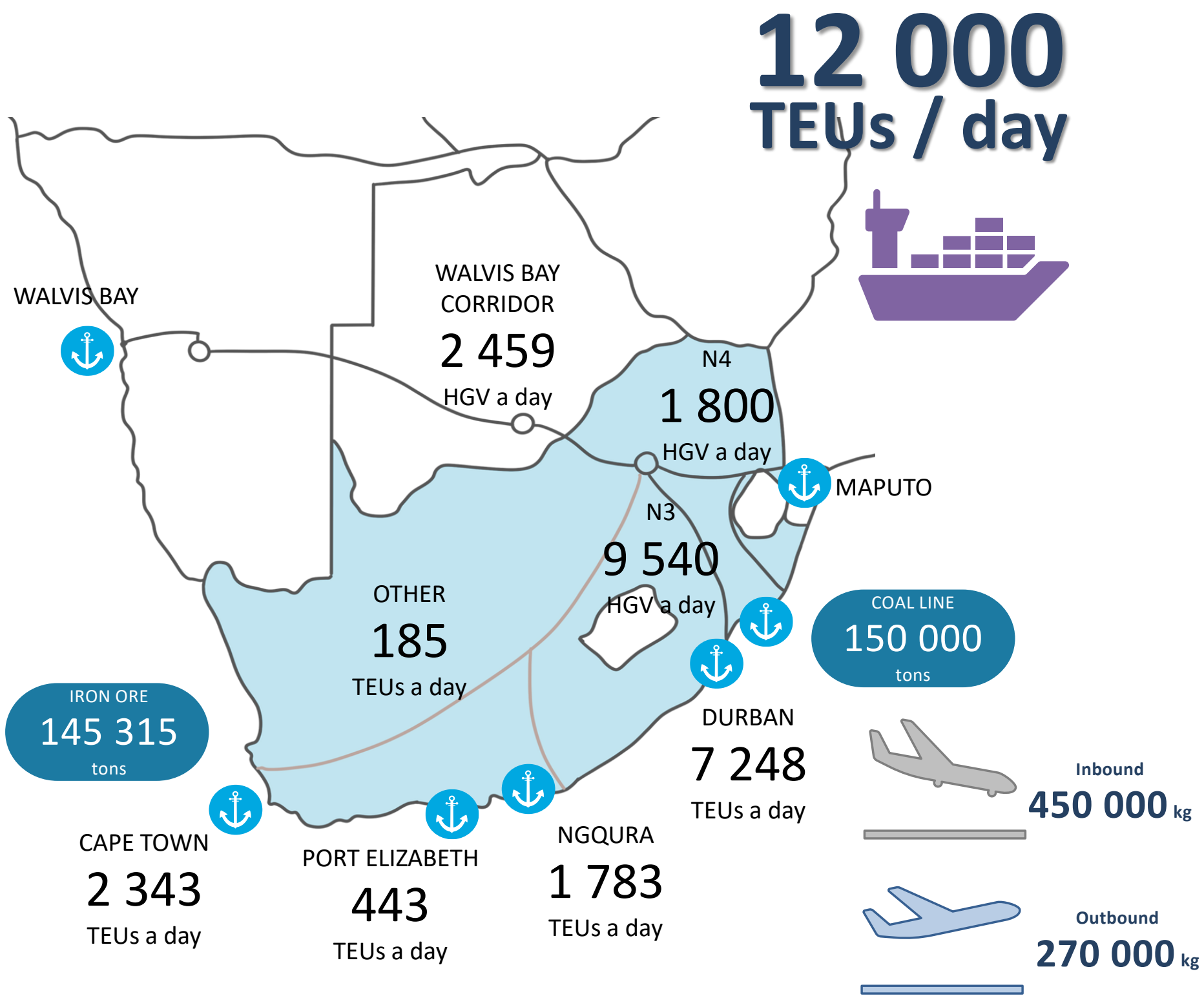
A Simple Solution: Co-Created, Modernised Processes



Daily South African Trade Flows in Volume & Value



~\$750 million / day



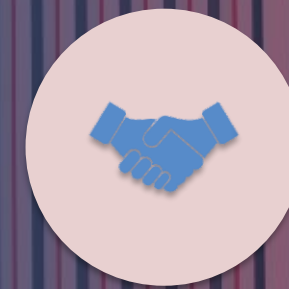
- Relief valve / NATCOR / Eastern Cape
- Equalizer fee
- Additional 4 tons – Durban to JHB
- Turn In Fee



Congestion



Used costs



Alternate support to promote exports



Supply chain planning



Road / Rail



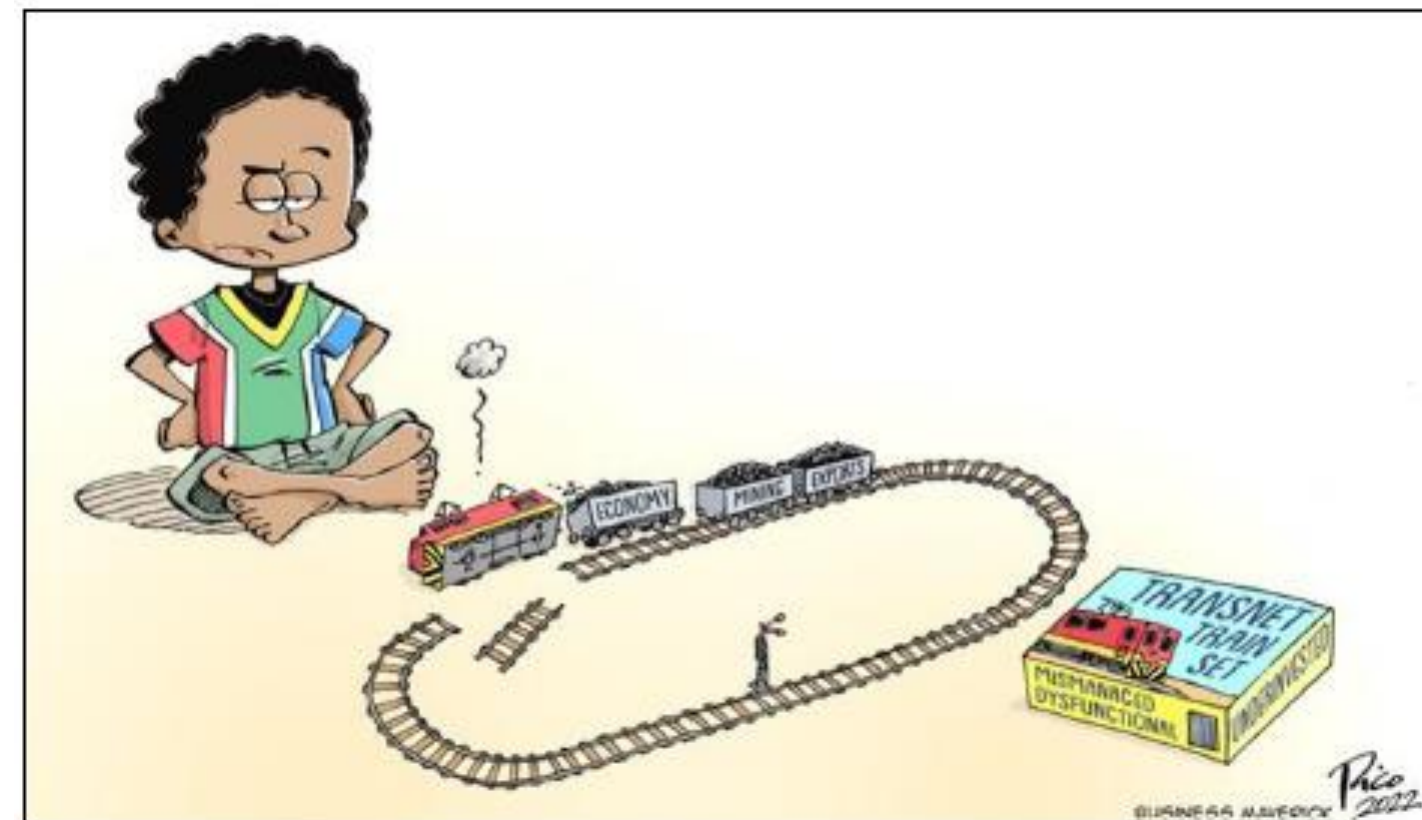
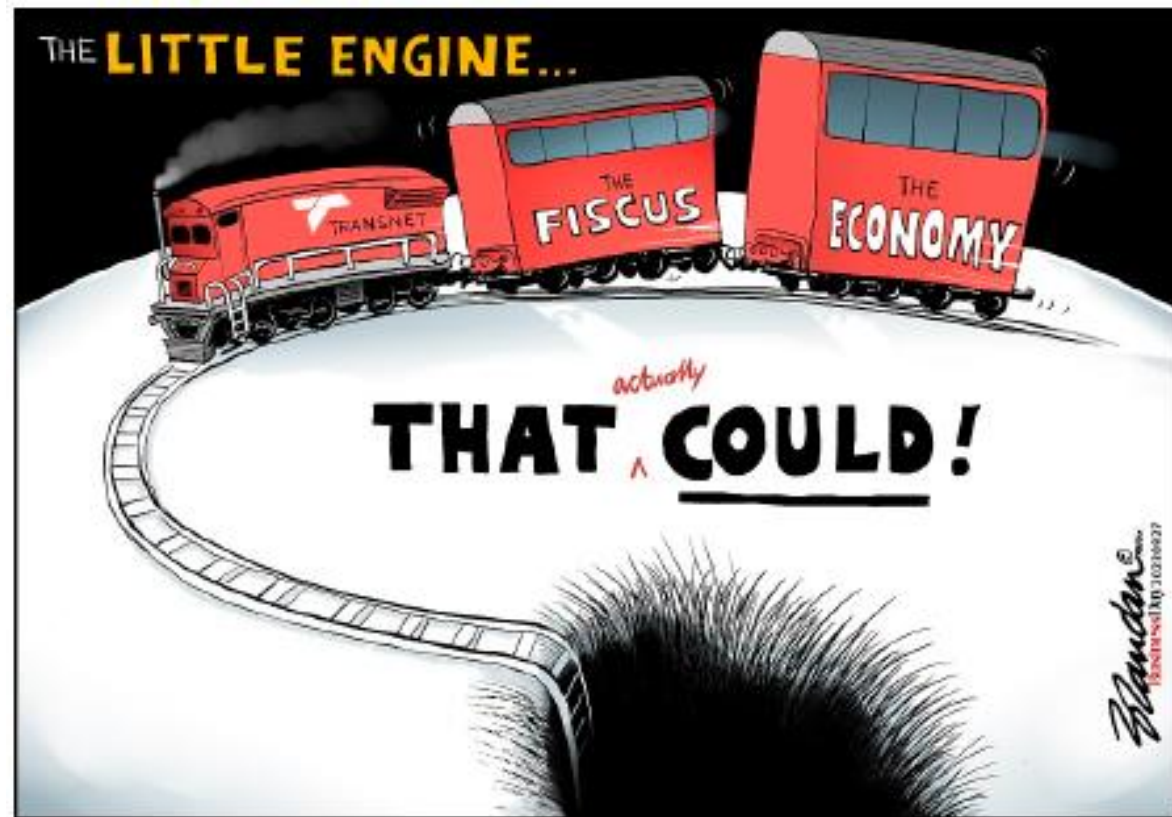
LOAD

SPEED

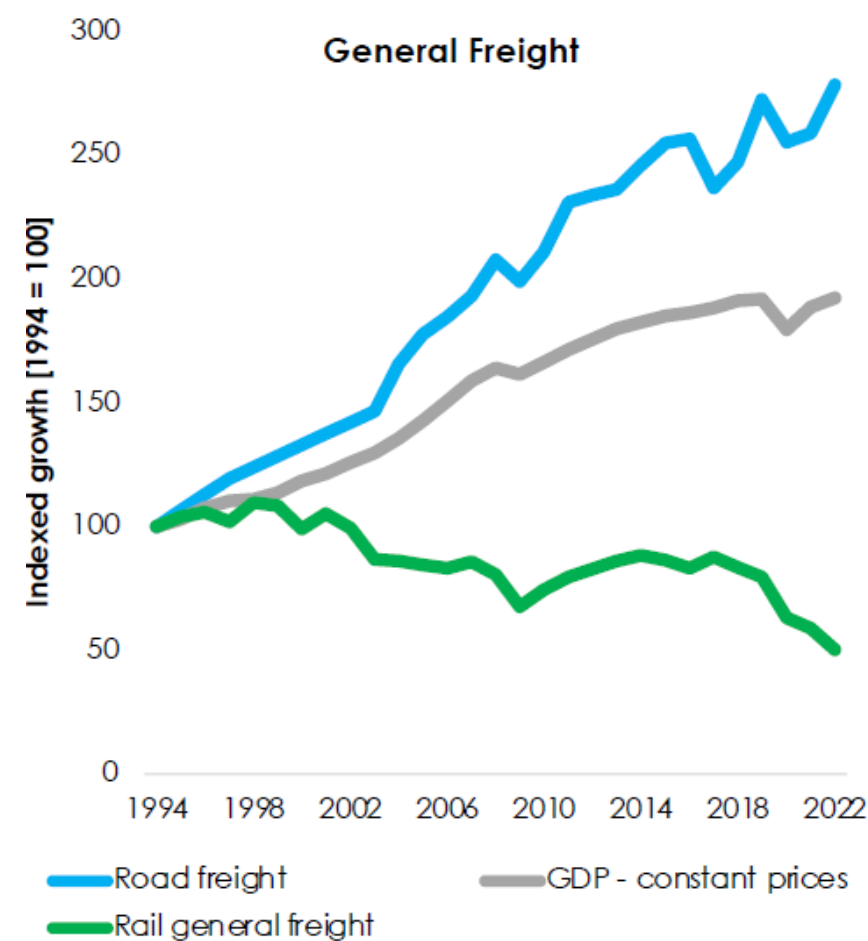
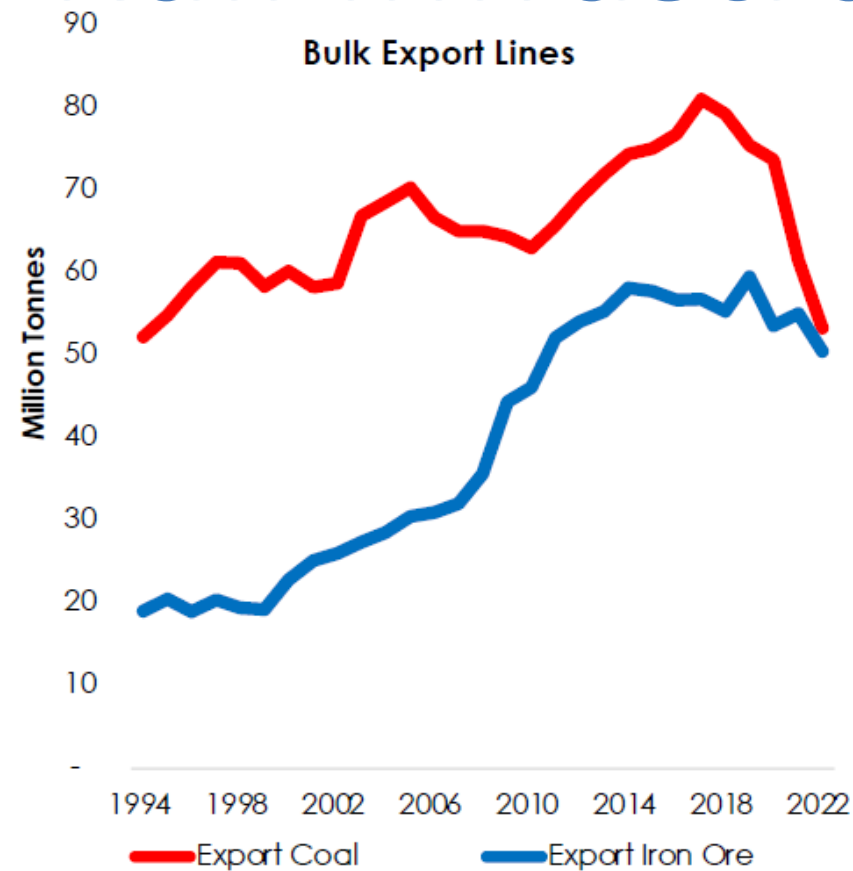
DISTANCE

**SERVICE
RELIABILITY**

Rail Sentiment?



Rail Infrastructure



Key

- Core network
- Closed lines
- Lifted lines
- Branch lines

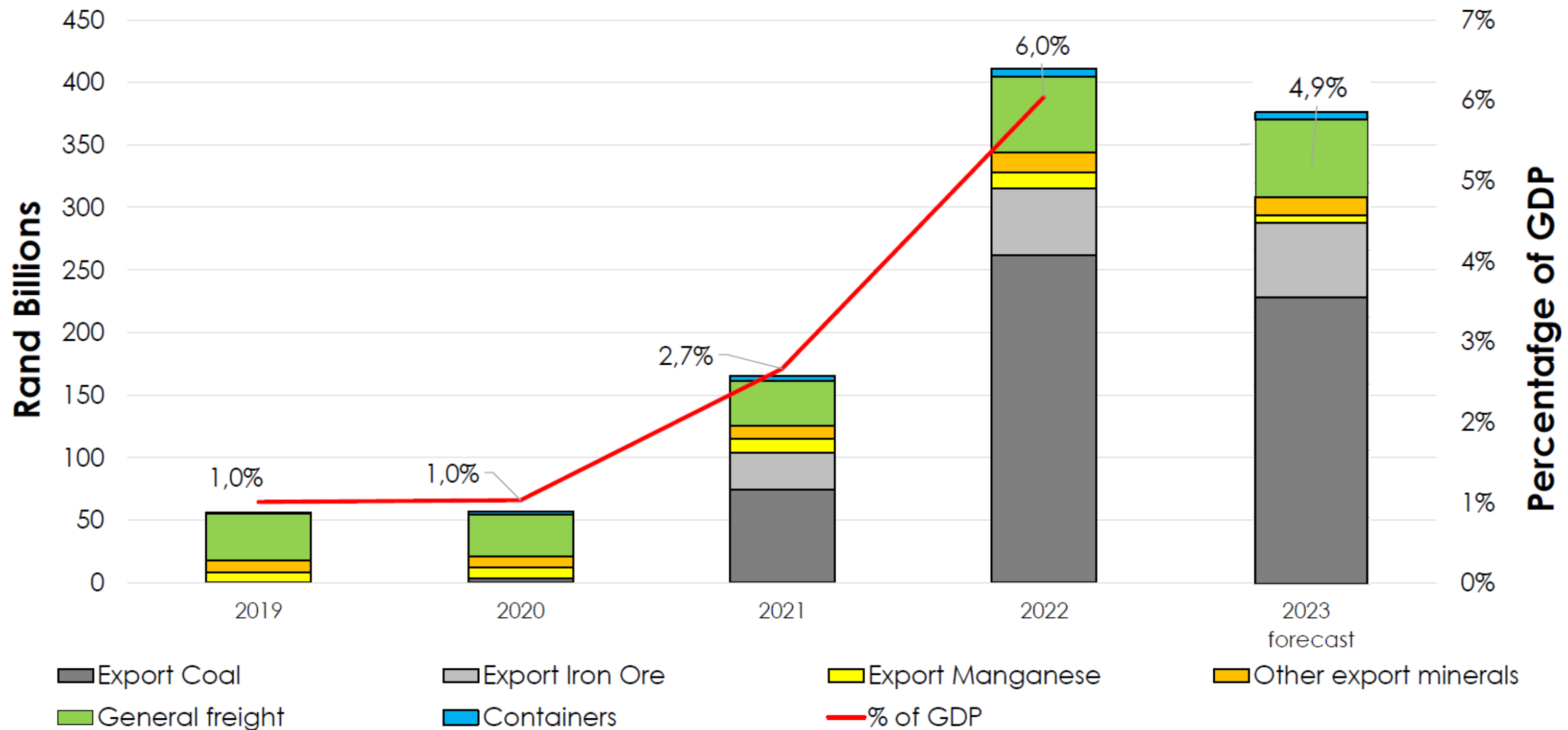


Rail infrastructure assets

- 30 400 km of track
- 20 953 route km
- Core network: 12 801 route km
- Bridges/structures
 - Rail carrying bridges - 2 696
 - Tunnels - 198
- Network traction
 - 50kV AC - 861 route km
 - 25kV AC - 2 516 route km
 - 3kV DC - 4 621 route km
 - Diesel - 12 955 route km
- Traction substations
 - 3kV DC substations - 346
 - 25kV AC substations - 99
 - 50kV AC feeder stations - 7
- Train authorisation systems
 - Signalling basic stations - 2 146
- Axle loading
 - Main lines at 20t/axle
 - Ore line at 30t/axle
 - Coal line at 26t/axle

One-third of palletised freight should be on the rail (often dry food), but nothing is. The same is true for industrial commodities, where only 10% remain. Domestic and export mining failures are killing our rural roads.

Rail cost to the SA Economy

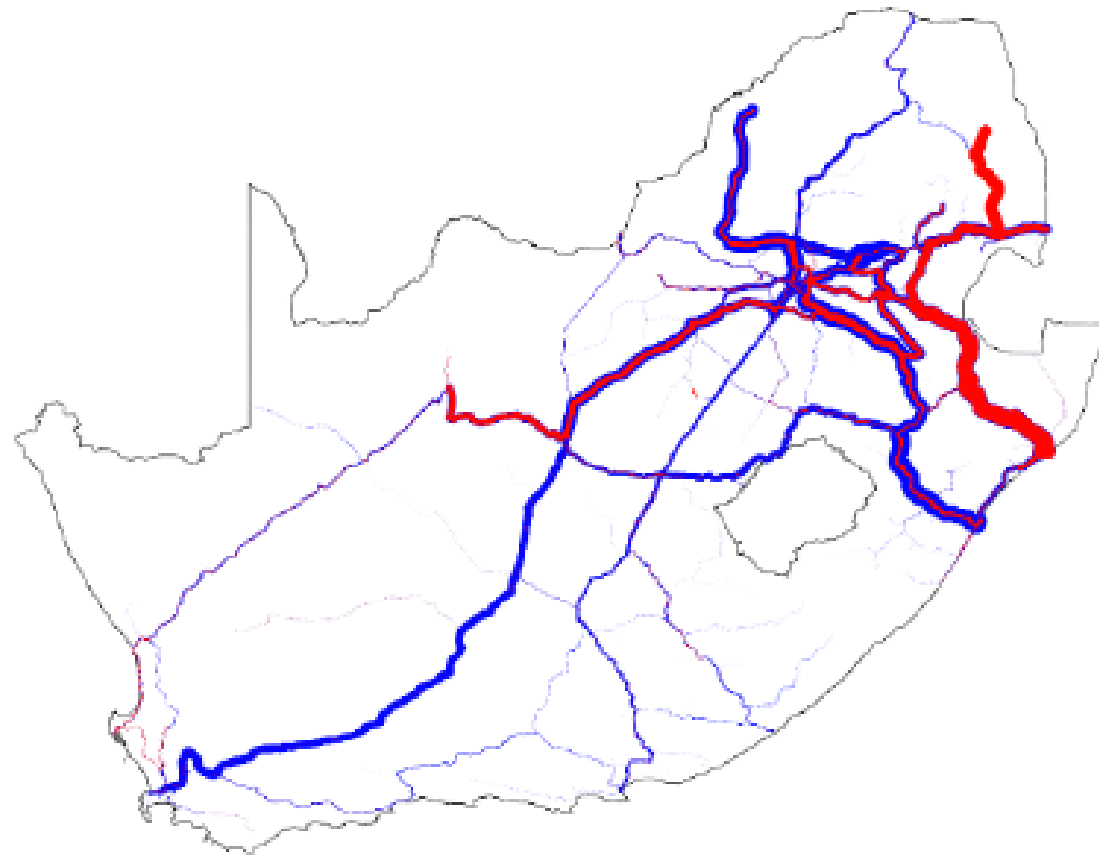


Source: GAIN Freight Demand Model™

Required Rail Network

2022

(What it is and what it should be)



2050

(What it should be)



X 5

Source: GAIN Freight Demand Model™

The current tonne-km of 15 billion should be 47 billion tonne-km and should reach 77 billion tonnes by 2050.

Causes of the crisis

Outcomes

Decline in rail volumes

Inefficiency and high cost

Low productivity

Immediate causes

Historical underinvestment in maintenance

Inadequate funding, weak implementation capability, and the diversion of resources to operating requirements



Security issues

The scale and frequency of cable theft has risen sharply in recent years, disrupting operations



Rolling stock

More than 200 locomotives are currently standing idle, and a significant proportion of the current rolling stock fleet is more than 40 years old



Operational inefficiency

Compared to international benchmarks, the South African rail system moves too little traffic, too slowly, and with low productivity

Unfunded mandates

Developmental mandates have received insufficient oversight, and the nature of and funding for such mandates has not been clear



Governance

The legacy of state capture and governance issues remains present in the sector, including corruption in procurement, weak oversight, and insufficient economic regulation



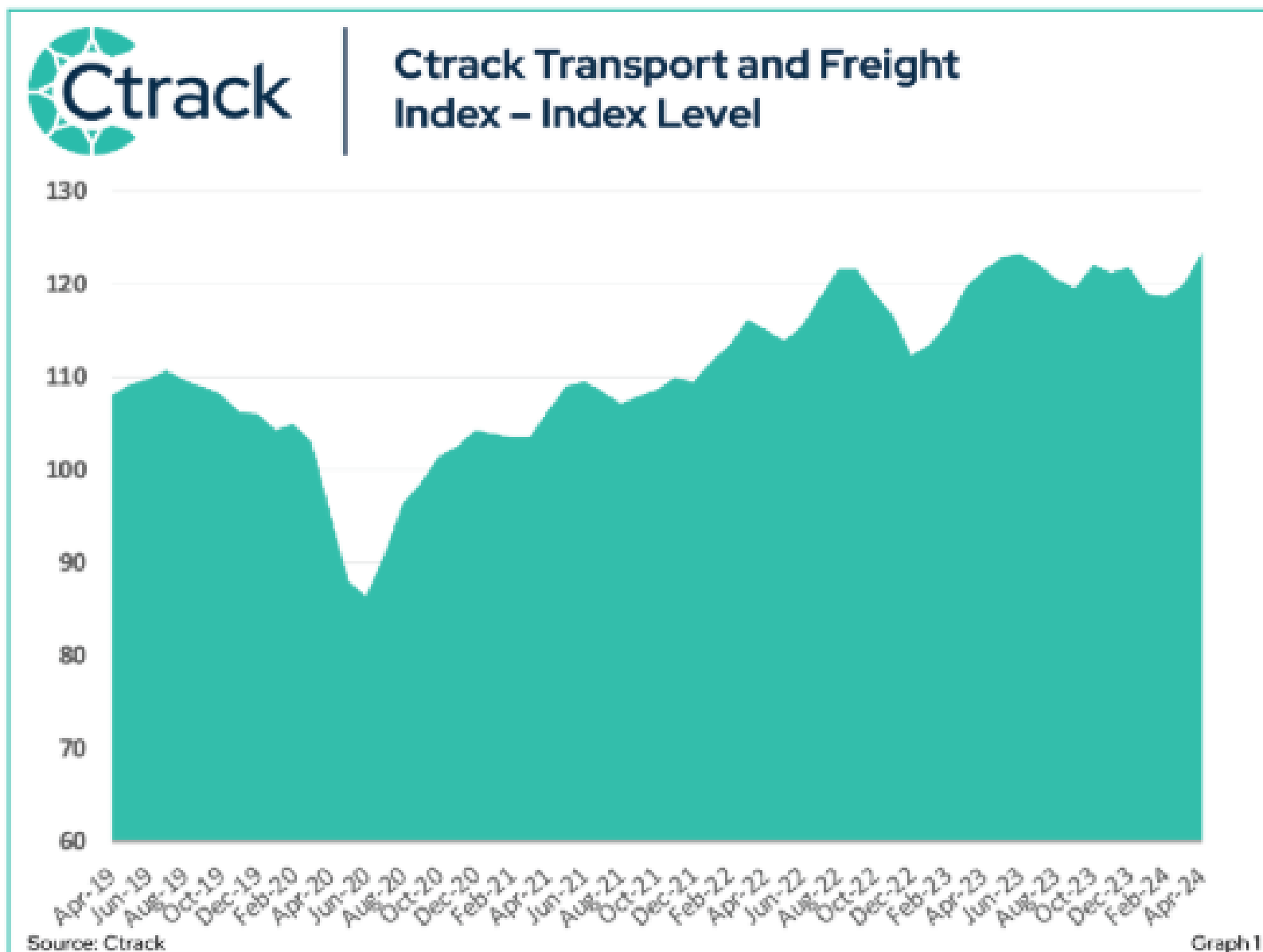
Structural causes

Essential facilities

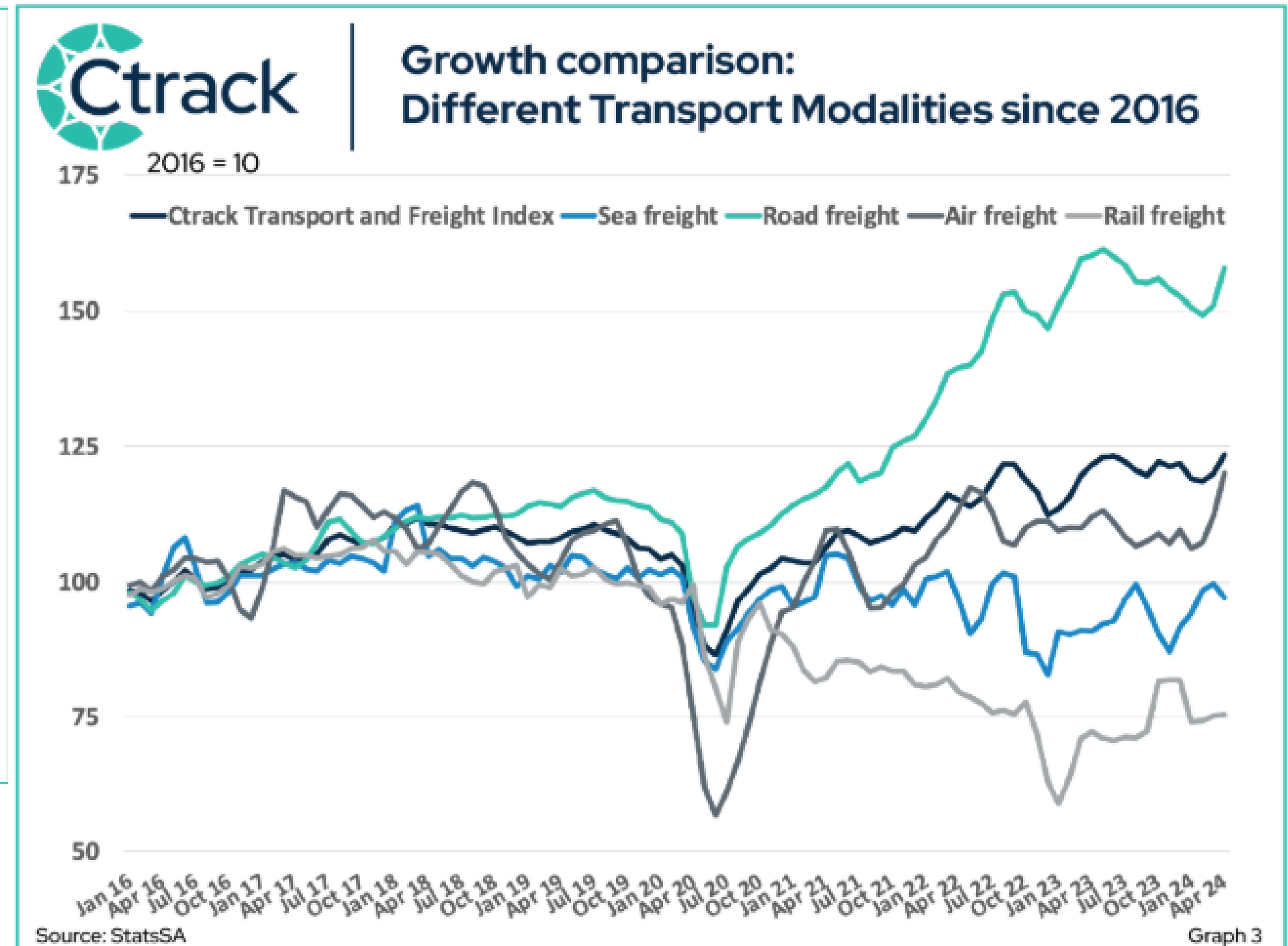
Under the current structure, competition is not effectively facilitated. In addition, the dominant firm is likely to continue to prioritise rail and ports operations, which bring in external revenues, leaving ports and rail infrastructure as a neglected internal cost centre.



Other modalities: Robust Road Freight?



1. The Ctrack TFI increased in March and April to reach 123,4, up by 2,8% (m/m) and 1,5% (y/y).
2. Except for sea freight & storage and warehousing, activity in all other subsectors increased monthly, led by notable increases in **air freight** and **road freight**.



3. The heavily weighted Road Freight sub-sector has grown notably in recent years and currently accounts for **83,6% of all freight payloads** in South Africa.

Degrading Road Infrastructure

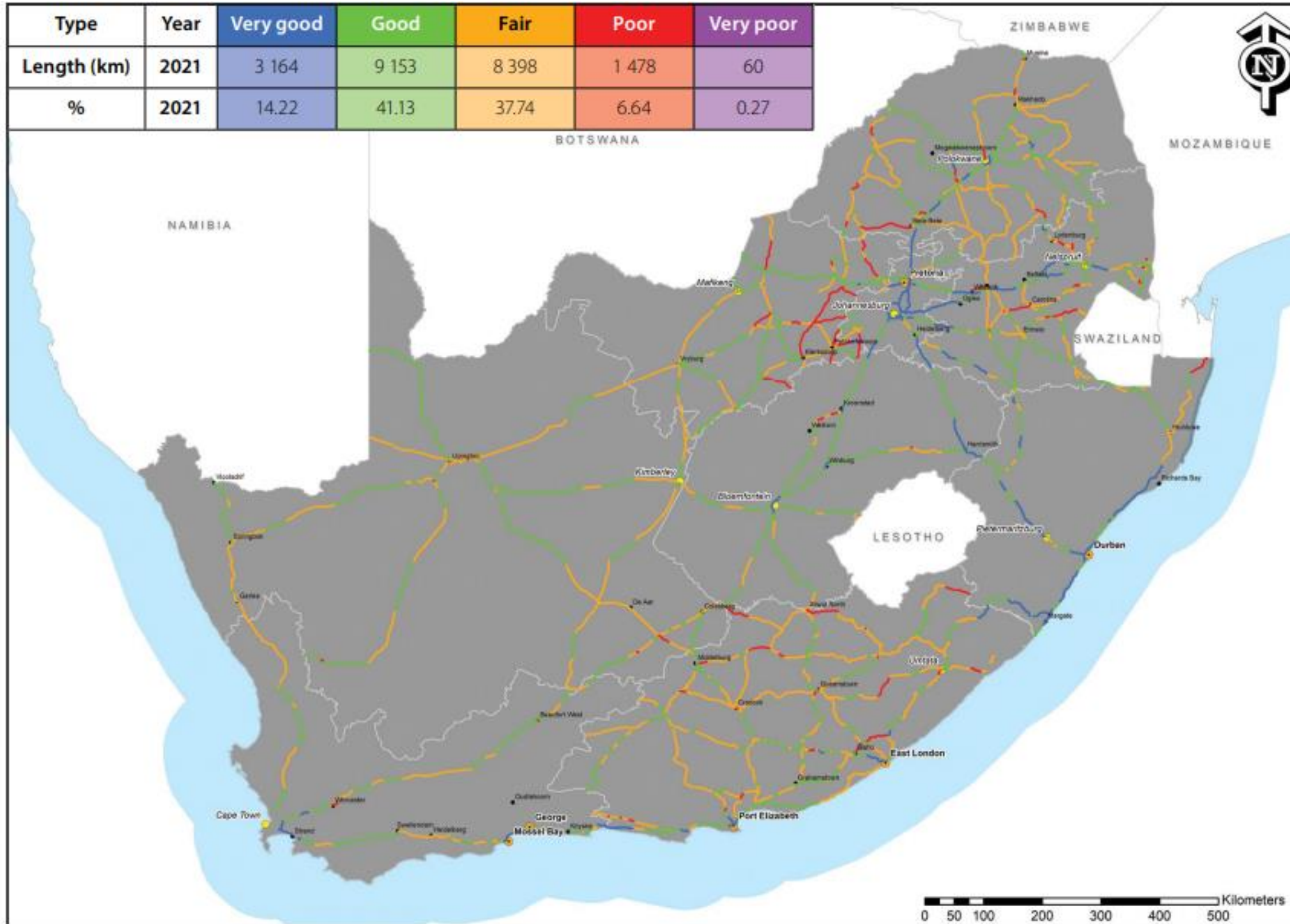


Figure 7 The SANRAL 2020/21 pavement condition (SANRAL, 2021)

Table 4 Records of road lengths in South Africa (Department of Transport)

An overview of the South African road network			
Authority	Paved	Gravel	Total
SANRAL	21 403	0	21 403
Provinces – 9	47 348	226 273	273 621
Metros – 8	51 682	14 461	66 143
Municipalities	37 691	219 223	256 914
Total	158 124	459 957	618 081
Un-proclaimed (estimate)		131 919	131 919
Estimated total	158 124	591 876	750 000

*rounded estimate

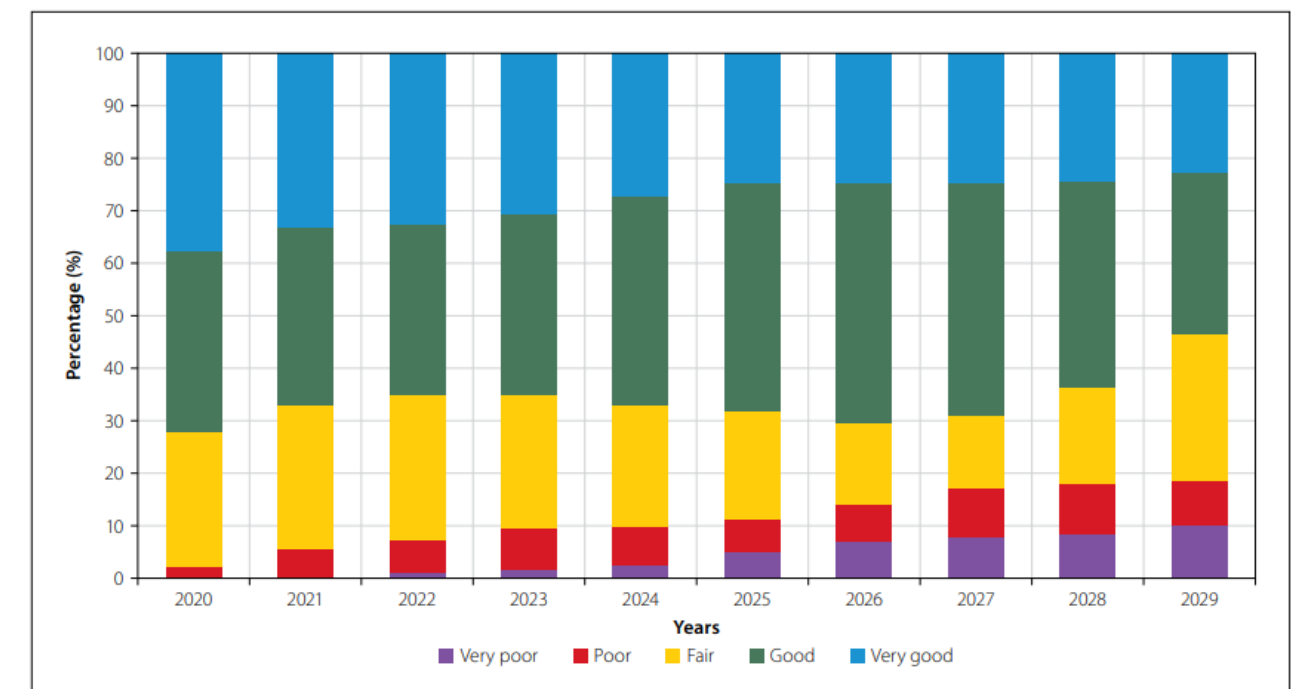


Figure 9 City of Cape Town predicted condition deterioration with no change in maintenance budget allocation

Source: [SAICE 2022 Report](#)

Network reconfiguration



Public monopoly model

Description	Infrastructure and operations public monopoly
Examples	Implemented in SA causing lack of competition and investment
Model structure	Transnet owns infra and has monopoly on operations however limited resources to invest due to vast infra needed
Impact	Lack of operator competition drives high costs and inefficiencies

Logistics in SA today



Concession model

Description	Public monopoly with concessions offered for dedicated infrastructure
Examples	Adopted in Brazil to some success – stifled competition
Model structure	Relevant for infrastructure with low competition otherwise stifles emerging players
Impact	Enabled investment into under-invested infra while enabling dedicated new infra build with minimal government spend



Open-access model

Description	Natural infrastructure monopoly with competing private and public operators
Examples	Successfully adopted in EU – creating jobs, improving availability and efficiency
Model structure	Transnet retains infra ownership while operators (public and private) bid for slots
Impact	Infra access fee generates revenue for investment into maintenance, upgrades, and eventually expansion

Potential future for SA logistics



Joint-venture model

Description	Joint private-public ownership of infrastructure, resources and operations
Examples	Successfully implemented on specific corridors in Australia
Model structure	Set up a JV between Transnet and private companies to own infra and/or other assets
Impact	Enabled a more efficient network, operating as an integrated logistics system



Private ownership model

Description	Full private ownership of infrastructure and operations
Examples	Adopted in North America with limited success
Model structure	Minimal customer influence on pricing, quality of infra/service, etc. due to private ownership of infra and operations
Impact	Anti-competitive leading to low investment, high pricing with low quality service – misaligned with SA equity goals

Degree of private sector participation

“Every project is an opportunity to learn, to figure out problems and challenges, to invent and reinvent”

David Rockwell

Thank you

