STATE OF LOGISTICS 2026

for South Africa

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Profile of GAIN Group (Pty) Ltd

GAIN Group (Pty) Ltd is a specialist research and consulting firm focusing on macrologistics, freight transport, trade and strategic planning. Operating at the interface of research, policy and industry, the company provides evidence-based analysis to support strategic decision-making in the public and private sectors. With roots in Southern Africa and an international perspective, GAIN Group approaches logistics as an interconnected economic system shaped by infrastructure, markets, institutions and wider socio-economic conditions.

Central to its work is the development and continuous refinement of data-rich, purpose-built quantitative models. These include the Freight Demand Model™ for South Africa (FDM™) and the Western Cape Freight Demand Model™ (WC FDM™), which each provide geographically and commodity-disaggregated intelligence on freight flows, transport modes, logistics costs and future demand. The Logistics Cost Model for South Africa is another core instrument, which quantifies expenditure across transport, warehousing, inventory carrying, and management and administration. These tools support freight forecasting, infrastructure and corridor planning, modal analysis, and the evaluation of policy and investment decisions.

GAIN Group combines advanced modelling with rigorous research, industry engagement and an interdisciplinary team with established academic credentials and practical experience. By interpreting quantitative findings alongside the economic, institutional and operational realities underlying them, GAIN Group connects detailed analysis with broader strategic choices.

As producer of the ***State of Logistics™ 2026 for South Africa***, GAIN Group applies these capabilities to examine national and provincial logistics costs, freight-system performance and the economic consequences of inefficiency. The report's focus on road–rail dynamics, infrastructure constraints, system resilience and ongoing freight logistics reform reflects the company's wider objective: to equip government and industry with credible intelligence to guide coordinated planning, targeted investment and improvements in South Africa's logistics efficiency and competitiveness.

Contact Details

Email address: admin@gaingroup.co.za

Phone number: +27(0)82 925 1864

Website address: www.gaingroup.co.za/

The latest edition of the ***State of Logistics™ 2026 for South Africa*** and its accompanying figures can be downloaded at:

- www.stateoflogistics.co.za
- www.gaingroup.co.za/state-of-logistics/

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Foreword

The logistics and supply chain management sector, worldwide and especially in a developing economy, plays a critical and vital role in the economy of a country. The sector performs an important role in facilitating trade within the country as well as across its borders. Freight that is produced – consumer goods, minerals, agricultural commodities and manufactured products – must be shipped and transported across the country, and internationally, in an efficient and effective way. All of this must be done timeously, keeping costs under control as well as satisfying clients with excellent service. This is a complex endeavour, with complex political challenges and uncertainties, high and ever fluctuating fuel prices and many other insecurities. Within this unpredictable environment the logistics and supply chain industry still needs to perform and remain competitive. The performance of the sector remains one of the core enablers of development.

The economy of South Africa is under performing and for the country to grow and compete in the global market it is essential that a comprehensive view of the state of logistics is maintained. Scientific and evidence-based performance measures are essential to provide policy and decision makers with sound and comprehensive national-level performance indicators. In measuring national-level logistics costs and performance, different countries use different approaches to determine the performance and to calculate the costs. One approach is to conduct national-level surveys based on questionnaire studies (e.g. Finland and Thailand), a second approach is to perform statistics-based studies which rely on data from the transport sector (e.g. USA and South Africa) while a third, less used, approach is to just perform a case-study (e.g. Norway).

The objective of all these approaches is to provide industry and government with data that would enable them to make informed decisions. At the time, I was still with the CSIR, and this motivation was a key driving force behind the publication of South Africa's first State of Logistics report, covering the year 2003, by the CSIR and its partners. The trigger for this initiative was a pie chart of the total national logistics cost in the country, with a breakdown of the various cost components, and the realisation that meaningful decisions can only be made with real data. In addition, only a few countries had similar publications, with the State of Logistics of the USA being the most well-known. The South African State of Logistics report was published for ten successive years, covering the years 2003 to 2012, with publication regrettably stalled after the 10th report.

Content that can be expected for inclusion in a State of Logistics report includes:

- What quantities of freight are shipped on different modes of transport?
- What does it cost to move freight through the country?
- What are the main drivers of costs in the logistics sector?
- Where are the deficiencies in the performance of the logistics sector?
- How does the state of logistics affect other sectors and the macro economy?

*The **State of Logistics™ 2026 for South Africa** is a welcome addition to what has been published previously. May this become an annual occurrence. Congratulations to the GAIN Group and thank you to their sponsors!*

Hans W Ittmann | *Associate Researcher,*
Institute for Transport and Logistics Studies, University of Johannesburg

Sponsor Messages

To build a more competitive South African economy, we need to address the costs and efficiency of moving goods. For businesses, logistics directly affects their input costs, inventory, working capital, delivery reliability and ultimately the ability to compete. This report puts data behind that reality. With national logistics costs projected to reach R1.156 trillion in 2026, or 14.6% of GDP, the challenge is no longer just about how much freight we move, but how efficiently we can move it.

Despite the challenges, there are some encouraging signs. Rail volumes are recovering and the economic cost of rail underperformance has come down considerably from its 2022 peak. The opportunity now is to build on these gains, translating improved performance into greater reliability and more competitive costs for businesses.

This matters even more when we consider what lies ahead. South Africa moved 790.1 million tonnes of freight in 2024, with demand forecast to reach 1.019 billion tonnes by 2055. We cannot meet that growing demand just by adding more capacity to an inefficient system. The opportunity is to use existing and future capacity better, improve reliability and remove avoidable cost from supply chains.

Logistics is part of Absa Business Banking's sector focus because it directly affects clients' operating costs, cash flow and ability to serve their customers. Our work with businesses across sizes and geographies highlights how disruptions can impact production, increase stock requirements, tie up working capital and restrict access to markets. The report examines these effects across mining, agriculture, manufacturing and retail. For clients, more reliable logistics can support predictable production and deliveries, reduce the need for buffer stock and release working capital for day-to-day operations and growth.

The report also highlights the need for operational improvements alongside sustained infrastructure investment. Selecting appropriate transport modes, increasing load utilisation, improving routing, undertaking preventive maintenance and using fleets more efficiently can help clients reduce avoidable transport costs and improve delivery reliability. Investment in roads, rail, ports and intermodal capacity remains essential to support these gains. Reliable data can help businesses prioritise changes and investment that improve supply-chain efficiency, manage costs and make better use of available capacity.

This resource provides a basis for businesses, policymakers and industry stakeholders to assess logistics pressures and identify opportunities for improvement. For clients, the benefits of progress are practical; greater certainty in planning, more dependable customer deliveries, less cash tied up in inventory and better access to markets. Together, these improvements can help businesses manage costs, compete more effectively and pursue investment, trade and growth opportunities.

Justin Schmidt | *Sector Executive for Transport & Logistics, Absa Business Banking*

A well-functioning provincial freight logistics system is essential to economic growth, export competitiveness, and inclusive development. The Western Cape Mobility Department recognises that efficient freight movement underpins many of the province's strategic priorities, from supporting key export industries and supply chains to improving regional connectivity and enabling investment.

As the provincial authority responsible for transport planning, the Department contributes to the advancement of freight and logistics through policy development, strategic planning, research, stakeholder collaboration and advocacy for infrastructure and operational improvements across the logistics network. In this context, the report provides an important evidence base for understanding system performance, emerging trends, and future challenges. The report insights support informed decision-making and constructive engagement between government, industry, and academia in pursuit of a more efficient, sustainable, and competitive logistics system.

Deidre Ribbonaar | *Acting Head of Department, Western Cape Mobility Department*

Overview

The ***State of Logistics™ 2026 for South Africa*** provides an evidence-based assessment of South Africa's national logistics costs and the key factors driving these costs. These outputs are largely provided by the Logistics Cost Model for South Africa, developed by GAIN Group, based on actual data for 2003-2024, an estimate for 2025 (indicated as '2025 E'), and a forecast for 2026 (indicated as '2026 F'). The Freight Demand Model™ (FDM™) for South Africa, developed by GAIN Group, is also used for complementary freight demand information. Unless otherwise stated, all annual figures refer to calendar years.

The report examines expenditure on transport, warehousing, inventory carrying, and management and administration. The analysis considers logistics expenditure trends in their historical and international context, recognising that South Africa's geography, freight intensity and economic structure create significant transport requirements, while unreliable infrastructure and inefficient operations add costs that could potentially be avoided.

Particular attention is given to road freight transport (which is currently the dominant freight mode, including changes in fuel, labour, vehicle ownership and other operating costs, as well as freight rates relative to inflation and diesel prices. Complementary freight demand analysis examines the distribution of freight across economic sectors, the respective roles of road and rail, and the consequences of transporting rail-friendly freight by road. Analysis also considers how logistics performance failures affect supply chains, export opportunities and broader economic competitiveness.

The report quantifies the continuing economic consequences of freight rail underperformance, comprising transport inefficiencies and unachieved bulk mineral exports; the latter represents foregone economic activity rather than direct logistics expenditure. Against this backdrop, the report assesses the recovery of rail volumes and ongoing structural reforms, emphasising that their success must ultimately be measured through more reliable services and lower avoidable logistics costs.

A dedicated Western Cape section considers provincial logistics costs and the factors shaping regional freight performance. The report concludes by identifying three complementary priorities for cost reduction: selecting the most appropriate transport mode; the effective use of transport capacity; and increasing operational efficiency. Together, these findings provide an evidence base for decisions by government and industry to strengthen South Africa's freight-system efficiency, resilience and competitiveness.

The rising cost of moving South Africa

South Africa's logistics bill passes R1 trillion

Logistics is the circulatory system of the South African economy. Almost everything that is mined, manufactured, grown, imported, exported or consumed depends on a logistics system to move the freight through the economy. The cost and efficiency with which this happens ultimately influence the competitiveness of South African businesses, the prices paid by consumers and the country's ability to compete in international markets.

The first-time national logistics costs for South Africa were calculated, was by Jan Havenga and Ilse Witthöft at Spoornet in 1997, when logistics costs for 1996 were quantified to be R76.1 billion, amounting to 18% of GDP. The resulting pie chart was widely shared and is shown in **Figure 1** in its original format. Since 2003, national logistics costs have been calculated utilising the Freight Demand Model™ and the Logistics Cost Model for South Africa developed by GAIN Group.

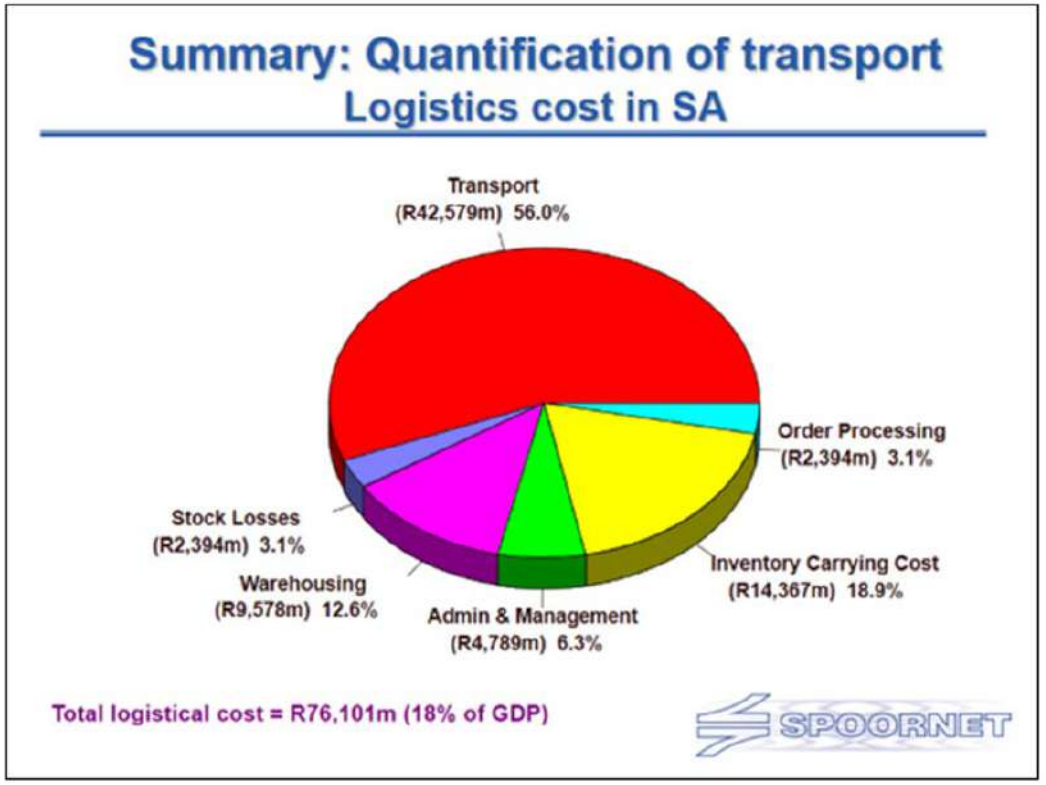

Figure 1: Logistics costs in South Africa in 1996, original format.
Source: Unpublished Spoornet (1997) report.

The ***State of Logistics™ 2026 for South Africa*** builds on more than two decades of research quantifying South Africa's national logistics costs. The latest results reveal a significant milestone – and a concerning acceleration in the cost of moving South Africa, yet some positivity in understanding the results.

South Africa's national logistics costs are projected to reach R1.156 trillion in 2026, up from an estimated R1.009 trillion in 2025 and R972 billion in 2024. The country's annual logistics bill therefore surpassed the **R1 trillion threshold for the first time in 2025**, with a further increase of R147 billion (14.6% of GDP) projected for 2026. More important than the nominal cost, however, is its relationship to the size of the economy.

Logistics costs are estimated to increase from **13.2% in 2025 to 14.6% of GDP in 2026**, the highest logistics cost burden recorded over the quantified 2003–2026 period. This is particularly striking relative to the pre-pandemic years, when the ratio generally ranged between 10% and 12% from 2009 to 2018.

The logistics cost-to-GDP ratio expresses the annual cost of moving, storing and managing freight relative to the size of the economy. This measure provides a useful high-level indication of the cost intensity of logistics, reflecting the expenditure required to create the **time and place utility** that makes goods available where and when they are needed, as described in the *Logistics Barometer South Africa 2015* (Stellenbosch University, 2015)[1].

The ratio is, however, not a direct measure of logistics efficiency. It is influenced by changes in both logistics expenditure and GDP, as well as structural characteristics such as geography, transport distances, commodity composition and freight intensity. A higher ratio therefore does not necessarily indicate poorer logistics performance, although a sustained increase may signal growing cost pressures that warrant closer investigation.

Although the logistics cost-to-GDP ratio declined during 2020 and 2021, this should not be interpreted as evidence of improved logistics efficiency. In 2020, logistics costs decreased by 7.3% (partly due to lower tonnages moved), compared with a 1.1% contraction in nominal GDP. In 2021, nominal GDP recovered considerably faster than logistics expenditure, reducing the ratio further to 10.4%. These movements reflect the uneven economic effects of the COVID-19 pandemic and subsequent recovery, rather than demonstrable structural improvements in freight-system performance (see **Figure 2**).

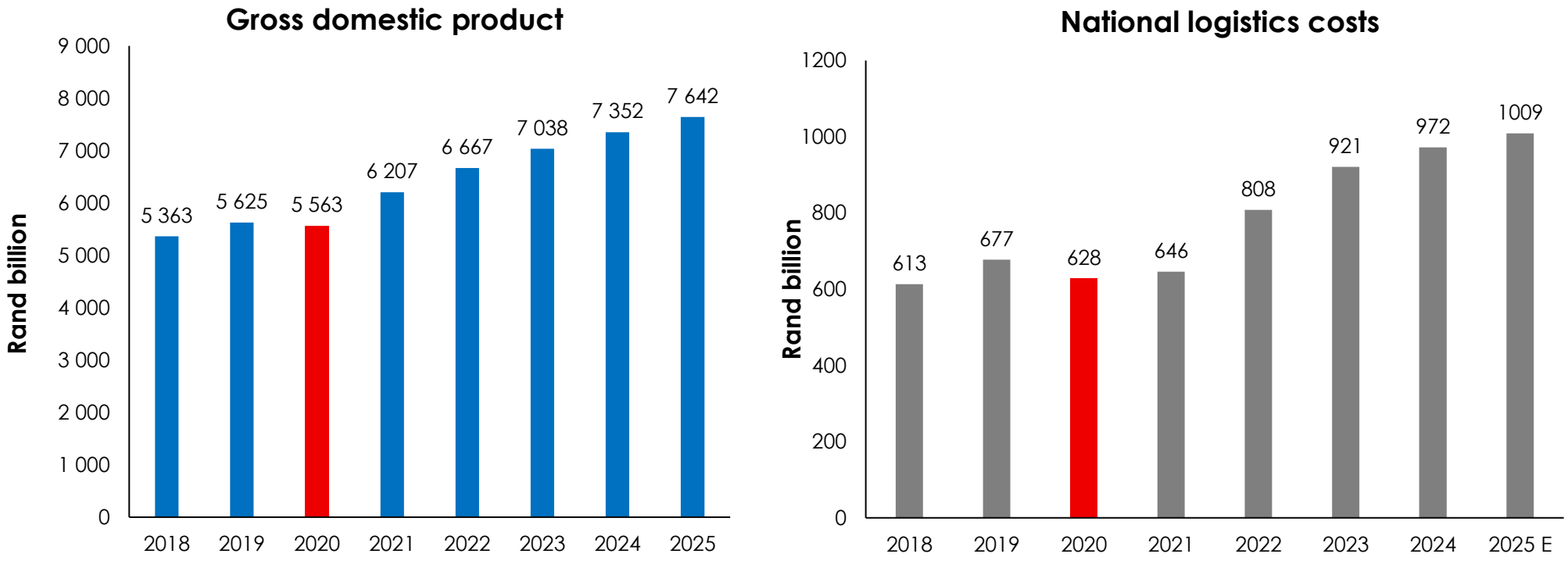

Figure 2: Trends in nominal GDP and national logistics costs, 2018–2025.

Source: Statistics South Africa's Statistical Release P0441 (2003-2025)[2] for gross domestic product; Logistics Cost Model for South Africa (2018-2024; 2025 estimate) for logistics cost.

Since 2022, the logistics cost-to-GDP ratio has risen above the typical 10-12% range seen in previous years, indicating that logistics expenditure has grown relative to economic output. The rising ratio is an important indicator of cost pressure, but it is not a direct measure of logistics inefficiency. Freight logistics is itself an essential productive activity, and not all associated expenditure is avoidable. The economic concern is the additional burden arising from unreliable infrastructure, inefficient operations and other addressable constraints.

Where these costs are avoidable, they act as an effective logistics tax on the South African economy – not a fiscal tax, but a burden transmitted through supply chains to business margins, competitiveness and consumer prices. Reducing unnecessary logistics cost will require sustained improvements in freight transport efficiency, infrastructure reliability and the structural performance of South Africa's logistics system.

Figure 3 places the post-2021 rise in longer-term perspective. The projected 2026 ratio of 14.6% exceeds the levels recorded earlier in the series, even though movements in the ratio could also reflect changes in GDP, freight volumes transported and the structure of economic activity.

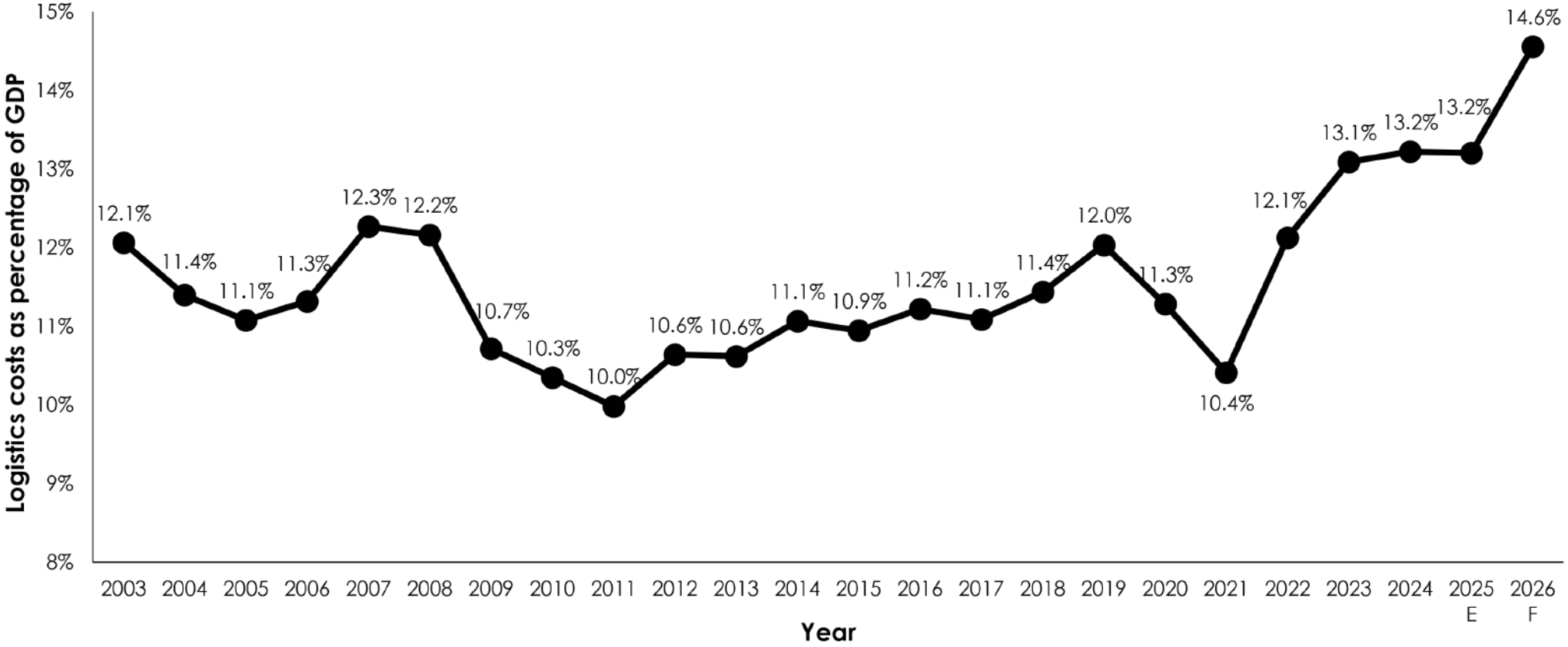

Figure 3: South Africa's logistics costs as a percentage of GDP, 2003–2026.

Source: Logistics Cost Model for South Africa (2003-2024; 2025 estimate and 2026 forecast) for logistics cost; Statistics South Africa's Statistical Release P0441 (2003-2025) and GAIN Group 2026 forecast for gross domestic product.

Where does the money go?

The Logistics Cost Model for South Africa classifies logistics expenditure into four principal cost components: **transport, warehousing, inventory carrying, and management and administration**. This framework has remained central to South Africa's logistics cost quantification methodology for more than two decades.

Figure 4 illustrates the evolution of these components between 2003 and 2026, highlighting both the substantial nominal increase in logistics expenditure and the persistent dominance of transport costs.

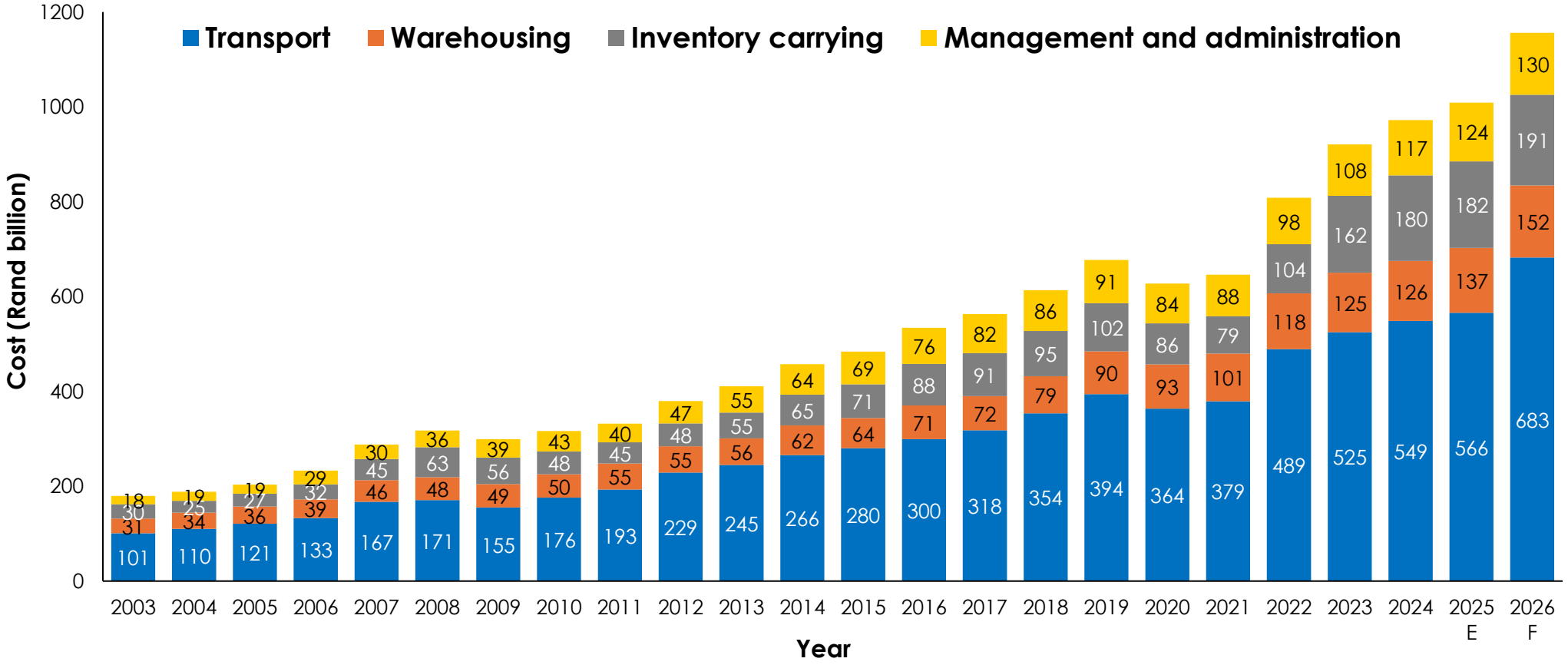

Figure 4: South Africa's logistics cost components, 2003-2026.
Source: Logistics Cost Model for South Africa (2003-2024; 2025 estimate and 2026 forecast).

The forecast composition of South Africa's R1.156 trillion logistics bill in 2026 is provided in **Table 1**.

Table 1: South Africa's logistics cost composition by component in 2026.

Logistics cost component	Cost (Rand billion)	Percentage share of total
Transport	683	59%
Warehousing	152	13%
Inventory carrying	191	17%
Management and administration	130	11%
Total	1 156	100%

Source: Logistics Cost Model for South Africa (2026 forecast).

Each component reflects a distinct aspect of logistics expenditure and is influenced by different economic and operational factors:

- **Transport costs** encompass expenditure associated with the physical movement of freight, including fuel, labour, vehicle depreciation, maintenance, insurance and other operating costs. These costs are particularly sensitive to fuel prices, freight distances, modal choices, infrastructure performance and broader economic or geopolitical developments.
- **Warehousing costs** relate to the facilities, equipment and operational resources required to store and handle goods. Key cost drivers include property and operating expenses, storage capacity, facility utilisation and the location and configuration of distribution networks.
- **Inventory carrying costs** represent the financial costs of holding goods in inventory, particularly the cost of capital tied up in stock. These costs are influenced by interest rates, inventory levels and supply-chain reliability, with disruptions and uncertainty often necessitating additional buffer stock to be held.
- **Management and administration costs** cover the planning, coordination, oversight and administrative activities required to manage logistics operations. These are influenced by personnel expenses, operational complexity, regulatory requirements and the efficiency of logistics management systems.

These cost categories are interconnected. Unreliable freight transport can increase inventory holdings and warehousing demand, while complex or unpredictable operations raise coordination costs. Consequently, inefficiencies in one part of the freight system may increase expenditure across several components.

Of the four components, transport remains by far the largest, accounting for almost six out of every ten Rand spent on logistics. This reaffirms the central role of transport in determining the overall cost of moving goods produced and traded through the South African economy.

The long-term increase is substantial: transport costs have risen from approximately R101 billion in 2003 to an estimated R683 billion in 2026, representing a nearly sevenfold *nominal* increase. More importantly, transport costs are projected to rise by R117 billion (20.7%) between 2025 and 2026. This accounts for almost 80% of the R147 billion increase in the national logistics bill, making transport the principal driver of the projected acceleration in 2026.

The other cost components are also considerable. Inventory carrying costs increased from R103.6 billion in 2022 to R162.3 billion in 2023 and are estimated to reach R191.4 billion in 2026, making this the second-largest component. The aggregate figures do not, on their own, isolate the relative contribution of interest rates, the value and volume of stock, or supply-chain reliability to this increase. Warehousing and management and administration costs are estimated at R151.7 billion and R130 billion, respectively, in 2026.

Comparing the logistics costs composition of 1996 to 2006, 2016, 2025 and 2026, however, reveal very little change (see **Figure 5**). Transport cost was 56% in both 1996, and 2025, with 2026 being 59% due to significant fuel price increases during 2026.

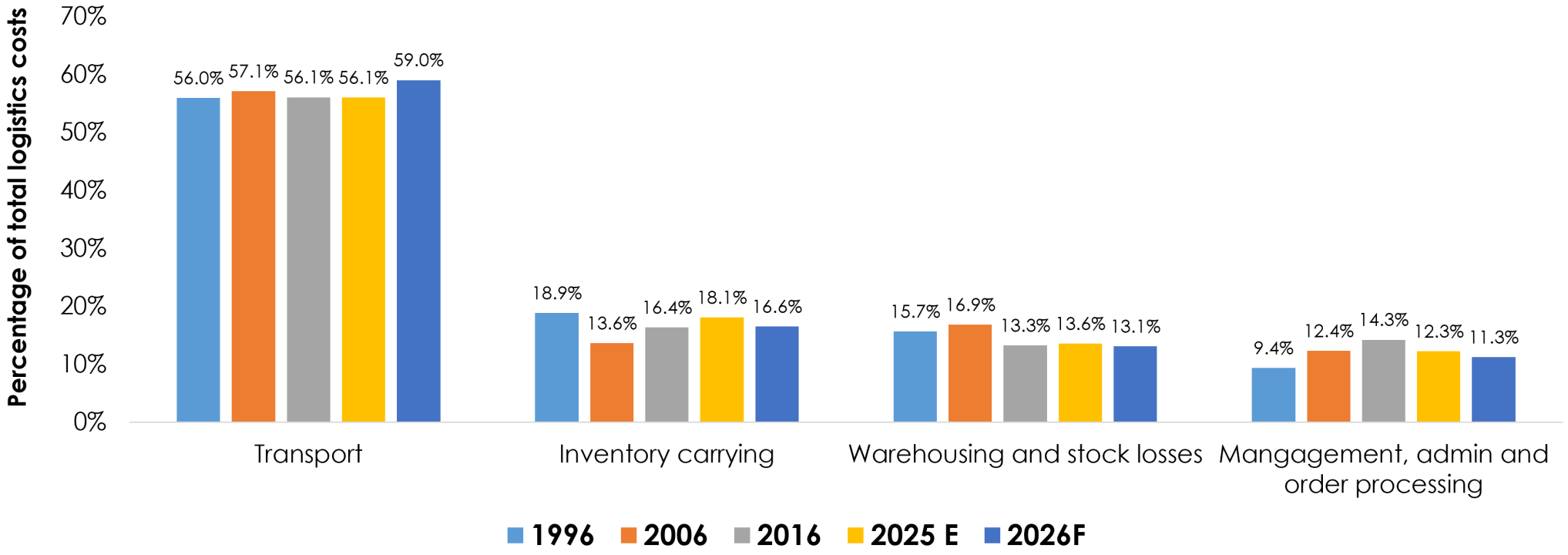

Figure 5: The underlying structure of logistics costs remains similar as three decades ago.
Source: 1996 from unpublished Spoornet(1997) report; Logistics Cost Model for South Africa (2006, 2016, 2025 estimate and 2026 forecast).

How do South Africa's logistics cost compare globally?

International comparisons provide useful context for assessing South Africa's logistics cost burden, but they must be interpreted with caution. **There is no globally standardised methodology for calculating national logistics costs**, with countries differing considerably in their definitions, cost components, measurement approaches and reporting frequency. Consequently, logistics costs expressed as a percentage of GDP are not directly comparable across countries and should not be interpreted as a definitive ranking of logistics efficiency.

Figure 6 compares South Africa with six other countries to reflect a decade of change by applying the most recent and historical values available for each. The reference years differ, and several recent observations are estimates or forecasts; the comparison is therefore most useful for understanding the direction of change, not constructing a precise international ranking.

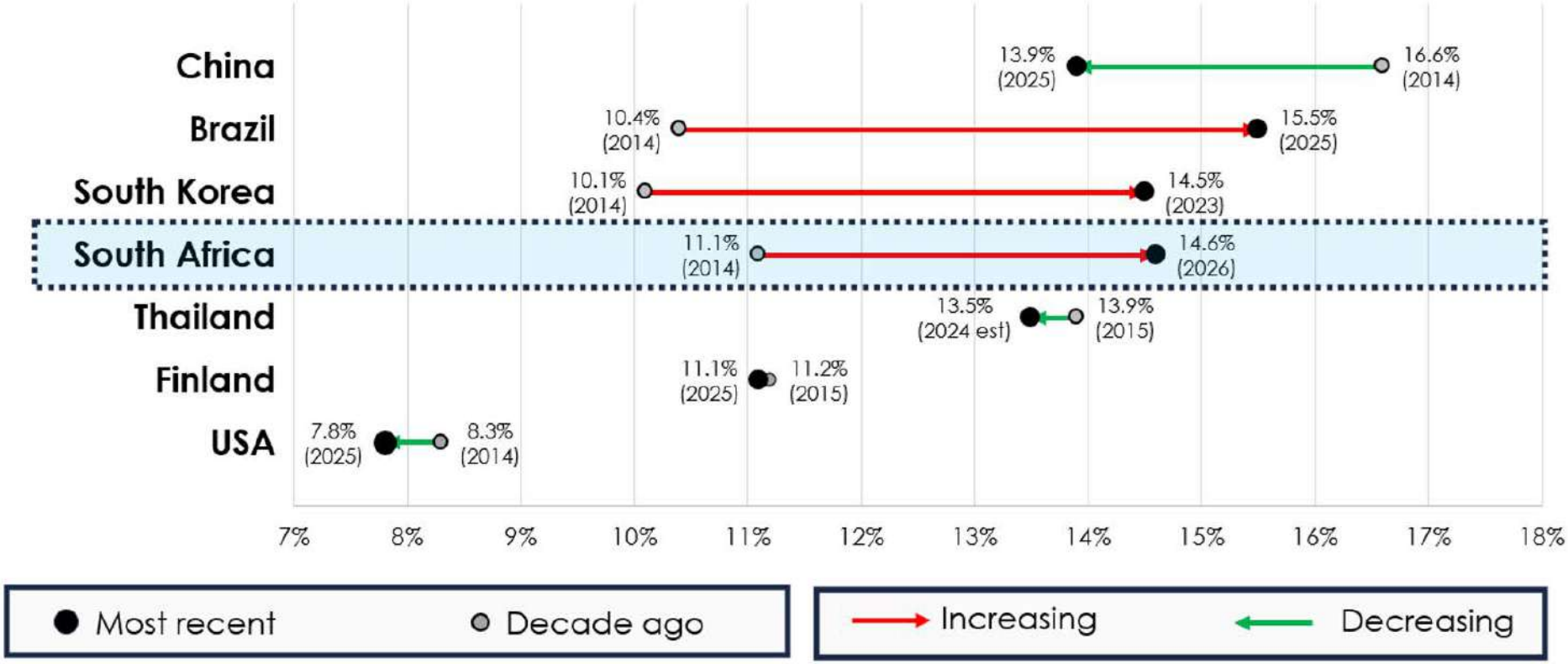

Figure 6: Selected international logistics cost-to-GDP ratios – historical and most recent values.

Source: China, 2014 from NDRC, NBS & CFLP (2015)[3] and 2025 from NDRC (2026)[4]; Brazil, 2014 and 2025 from ILOS (2026)[5]; South Korea, 2014 from National Indicator System of Korea (n.d.)[6] and 2023 from KOTI (2025)[7]; South Africa, 2014 and 2026 forecast from GAIN Group calculation provided in this report; Thailand, 2015 from NSO (2021)[8] and 2024 estimate from NESDC (2025)[9]; Finland, 2015 from Solakivi et al. (2017)[10] and 2025 from Solakivi et al. (2026)[11]; USA, 2014 from CSCMP (2015)[12] and 2025 from CSCMP (2026)[13].

Note: The reference years and methodologies of these logistics cost-to-GDP ratios differ.

South Africa's logistics costs are estimated at **14.6% of GDP in 2026, compared with 11.1% in 2014**, representing an increase of 3.5 percentage points. This places South Africa towards the higher end of the selected countries, although Brazil records a higher ratio of 15.5% in 2025, while South Korea's ratio recorded 14.5% in 2023.

The direction of change differs considerably across the selected countries. China's reported ratio declined from 16.6% in 2014 to 13.9% in 2025, while the United States decreased from 8.3% to 7.8%. Thailand's ratio fell modestly from 13.9% to an estimated 13.5%, and Finland remained relatively stable at approximately 11% of GDP. Conversely, Brazil's reported ratio increased from 10.4% in 2014 to 15.5% in 2025, while South Korea's rose from 10.1% in 2014 to 14.5% in 2023.

These divergent trends should not be equated directly with improvements or deterioration in logistics efficiency. Changes in GDP, industrial composition, freight intensity, geography and international trade can all influence the ratio, in addition to the costs and performance of logistics operations themselves.

South Korea's government explicitly cautions against interpreting a higher national logistics cost ratio as evidence of an inefficient logistics system. The country's national statistics recognise that logistics expenditure may also reflect the economic value generated by the logistics sector, while greater trade activity, geographical characteristics and industrial structure can contribute to higher reported costs.

The international evidence is therefore most useful as an indication of differing logistics cost burdens and trends, rather than a ranking of national logistics efficiency. For South Africa, the sustained increase in its own ratio is more concerning than its position among the selected comparators.

What is an appropriate logistics cost benchmark for South Africa?

The international evidence does not establish a universally appropriate logistics cost-to-GDP ratio. Although countries such as the United States achieve ratios below 8%, these reflect economic structures, geographical circumstances, freight characteristics and measurement approaches that differ substantially from those of South Africa.

South Africa is a particularly transport-intensive economy. The *Logistics Barometer South Africa 2015* (Stellenbosch University, 2015)[1] described the country as "transport-hungry", reflecting the disproportionately high level of freight movement generated relative to its contribution to global GDP. Long inland transport distances, the spatial separation between major economic centres and ports, and dependence on bulk commodities create substantial structural logistics requirements that cannot be eliminated. These inherent but unavoidable characteristics must, however, be distinguished from additional costs arising from infrastructure constraints, declining rail performance, operational inefficiencies and excessive reliance on road freight.

The more meaningful question is therefore how much of South Africa's logistics cost burden is structurally unavoidable, and how much can be reduced through improved logistics efficiency and system performance?

South Africa's historical ratio of approximately 10–12% across much of 2009–2018 offers a useful domestic reference, but not an established optimum. Returning towards this range could be a longer-term aspiration, subject to changes in economic output, freight demand and the feasibility of cost reductions. Any formal national target should be informed by detailed modelling of achievable improvements and supported by operational performance indicators.

The objective should therefore be to reduce avoidable logistics costs and improve the competitiveness and reliability of South Africa's freight system, and catalyse growth and development rather than to pursue an arbitrary international benchmark. The long-term relationship between nominal expenditure and economic output, shown in **Figure 7**, provides additional context for assessing this challenge.

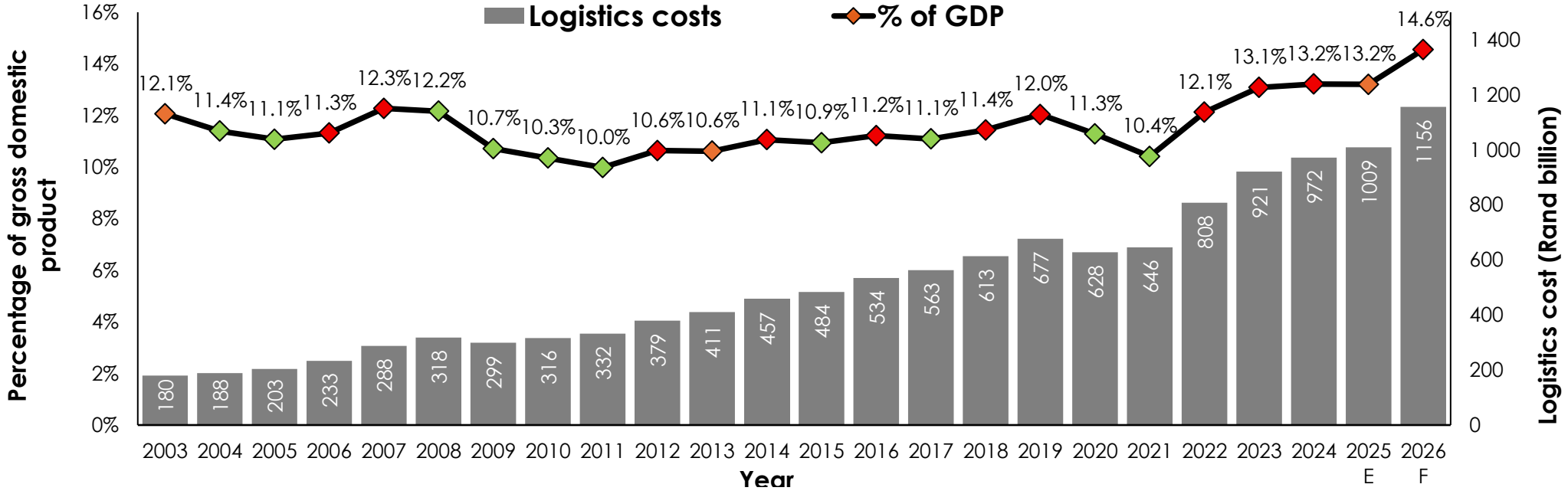

Figure 7: South Africa's logistics costs (R billion) and logistics costs as a percentage of GDP, 2003-2026.

Source: Logistics Cost Model for South Africa (2003-2024; 2025 estimate and 2026 forecast) for logistics costs; Statistics South Africa's Statistical Release P0441 (2003-2025) and GAIN Group 2026 forecast for gross domestic product.

Note: Marker colours indicate year-on-year changes in the logistics cost-to-GDP ratio: green represents a decrease, red an increase, and orange broadly unchanged levels. These movements do not necessarily reflect corresponding improvements or deterioration in logistics efficiency.

The figure brings together South Africa's nominal logistics expenditure and its cost relative to GDP. Nominal costs increase from approximately R180 billion in 2003 to a projected R1.156 trillion in 2026, but the ratio does not move in a straight line. Between 2007 and 2011, for example, nominal costs rose from R288 billion to R316 billion, while the ratio declined from 12.3% to 10.0%. This demonstrates why the ratio must be considered alongside changes in economic output rather than treated as a standalone measure of logistics efficiency. GDP ratios should therefore be considered alongside operational measures of transport efficiency, corridor performance, rail competitiveness and supply-chain reliability.

The more concerning development is the simultaneous increase in both measures since 2021. Nominal logistics costs are projected to rise by R510 billion between 2021 and 2026, while the logistics cost-to-GDP ratio increases by 4.2 percentage points, from 10.4% to 14.6%. Following little change in the ratio in 2024 and 2025. The pronounced projected increase in 2026 indicates that logistics expenditure is once again rising substantially faster than economic output.

Taken together, these trends reinforce the need to distinguish unavoidable structural logistics requirements from costs that can be reduced through better system performance. Progress should be judged not only against the national logistics cost-to-GDP ratio, but also against measures of transport efficiency, corridor performance, rail competitiveness and supply-chain reliability.

Road freight transport costs

Road freight is an important component of South Africa's freight logistics system, and the cost of moving goods by road is shaped by far more than the price of fuel. This section examines how the principal road freight cost components have evolved, how their rates of growth differ, and how the composition of expenditure has changed over a decade.

The Logistics Cost Model for South Africa distinguishes nine road freight transport cost components. **Table 2** summarises the scope of these components.

Table 2: Road freight transport cost components.

Road freight transport cost component	Description
Fuel	The price of fuel is based on the weighted average annual price, taking cognisance of the different inland and coastal prices, for 500 parts per million (ppm) diesel. Bulk rebates are ignored.

Truck driver wages	Truck driver and assistant wages vary considerably across the country based on vehicle size, primary and secondary distribution tasks, region, operators, and the structure of remuneration packages. All assumptions, in line with wage agreements between the Road Freight Employers' Association and the National Bargaining Council for the Road Freight and Logistics Industry, include an allowance for company contributions, but exclude overtime and bonuses.
Depreciation	An annual depreciation percentage is considered per vehicle combination, as well as a residual value per vehicle.
Insurance	Insurance cost assumes that the operator has a low risk rating. Insurance costs are aligned with industry information.
Cost of capital	All estimates are based on a cost estimate for new vehicles and trailing equipment. The initial cost of vehicles, trailers, bodies, and auxiliary equipment (such as refrigeration units and cranes) is based on the average of published selling prices of such items in the modelled year in question, less known fleet discounts.
Maintenance & Repairs	The assumed cost of maintenance is based on current vehicle manufacturer maintenance contract rates, expected economic component life and industry experience. The assumptions consider the complexity of each task, including typical operating conditions such as roads, topography, and traffic density. Repair and maintenance costs for refrigeration operations are calculated in hours.
Tyres	Tyre life is based on the typical casing life that is obtained in the various operations. Tyre prices are aligned with industry information.

Vehicle licence fees	Licence fees for vehicles and trailers are based on the average license fees of each province, as the licensing province of trucks is unknown, and nationally distributed (this average assumption is deemed sufficient, given the current status of road freight user-pay charges).
Toll fees	Assumed route-incurred toll fees are applied proportionally to the number of trips that each movement accounts for, according to the size structure of the vehicle used for its toll fee class.

Source: Logistics Cost Model for South Africa.

These components are interconnected. For example, vehicle prices influence ownership-related expenditure, while fleet utilisation, maintenance practices and operating conditions can influence several costs simultaneously. Their combined effects are reflected in the trends that follow.

The evolution of road freight transport costs

Figure 8 shows the nominal expenditure associated with each road freight cost component between 2014 and 2026. Fuel is the largest single component throughout the period, with particularly pronounced increases visible in 2022 and in the 2026 forecast. Depreciation and truck driver wages also represent substantial expenditure, while maintenance and repairs, insurance and the cost of capital contribute to the broader growth in road freight costs.

The figure makes clear that fuel prices can generate marked year-on-year volatility, but that the overall cost trajectory is shaped by several components. Changes in these aggregate expenditures may reflect input prices, freight activity, fleet characteristics and modelling assumptions; they should not be interpreted as changes in unit operating costs alone.

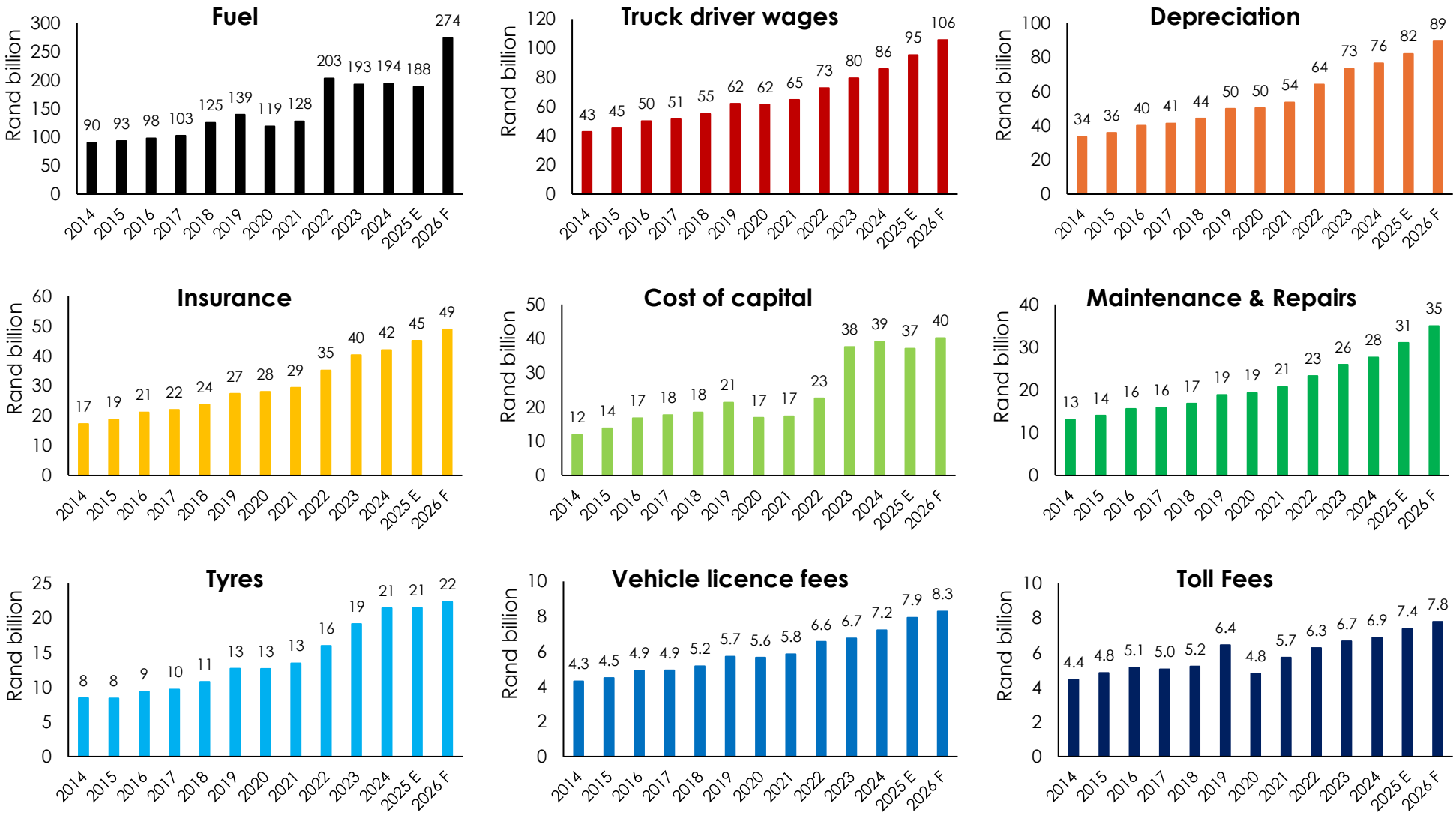

Figure 8: South Africa's road freight transport costs by component (R billion), 2014-2026.
Source: Logistics Cost Model for South Africa (2003-2024; 2025 estimate and 2026 forecast).

Figure 9 indexes each road freight cost component to its 2014 level (2014 = 1.0), allowing the relative changes to be compared independently of the size of each component.

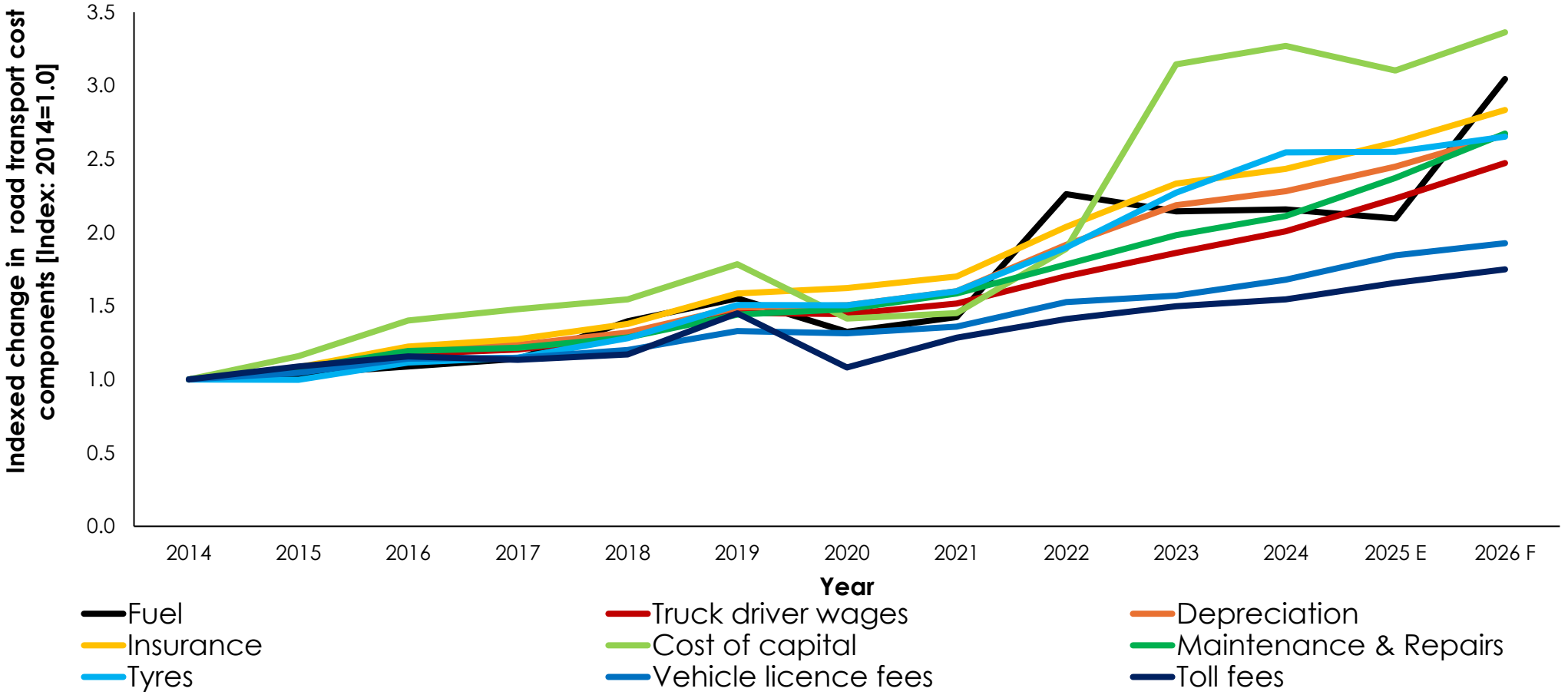

Figure 9: Indexed change in South Africa's road freight transport cost components (2014=1.0), 2014-2026.
Source: Logistics Cost Model for South Africa (2014-2024; 2025 estimate and 2026 forecast).

By 2026, the cost of capital is forecast to increase to approximately 3.3 times its 2014 level, exceeding the roughly threefold increase in fuel expenditure. Insurance and depreciation have also risen considerably, while the costs of truck driver wages, maintenance and repairs, and tyres show sustained growth. Licence and toll fees have increased more slowly in relative terms. The indexed series also illustrates that fuel expenditure has fluctuated more sharply than several other components.

These movements underline the importance of looking beyond fuel when assessing longer-term cost pressures. The index is based on aggregate nominal expenditure, however, so it cannot by itself separate price inflation from changes in freight volumes, fleet composition or other modelled operating requirements.

How has the road freight cost structure changed?

Figure 10 provides a ten-year comparison of the percentage composition of road freight expenditure in 2015, 2025 and 2026.

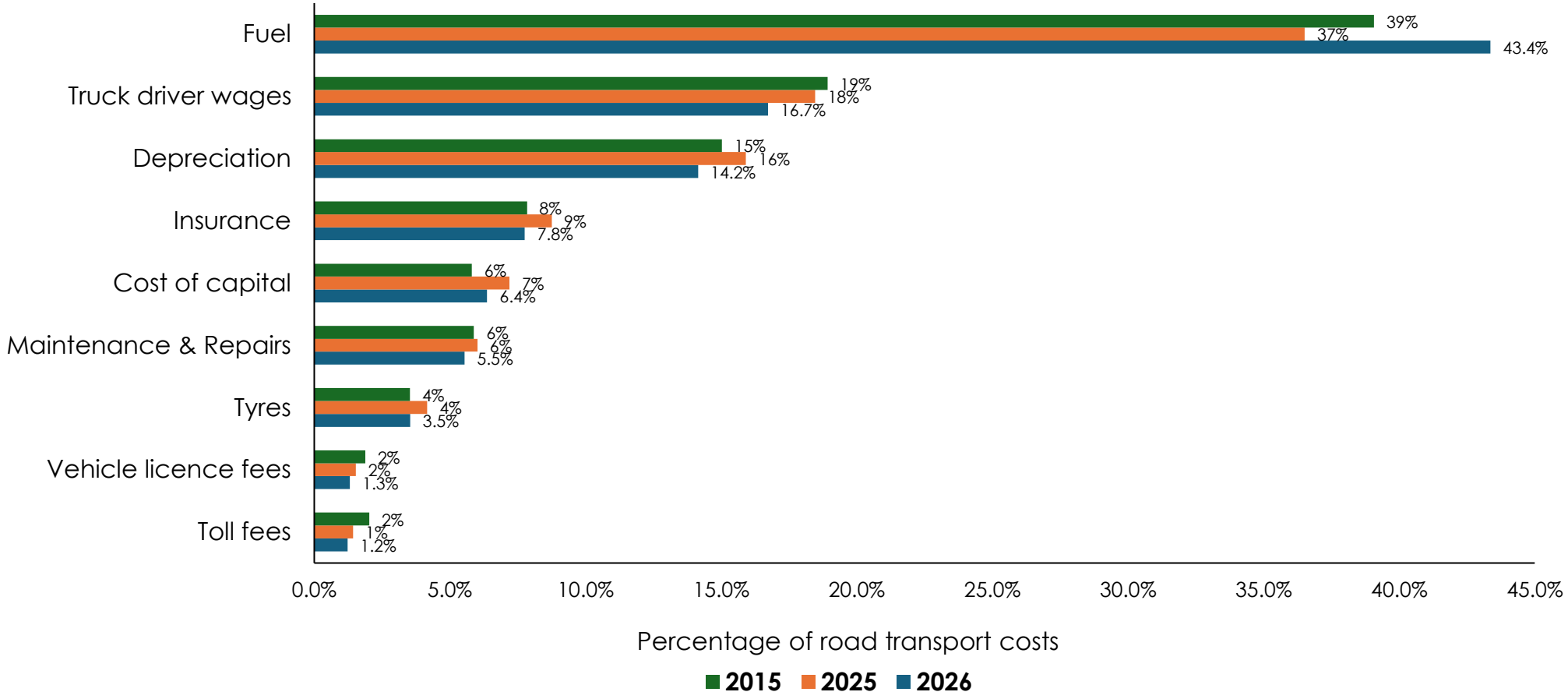

Figure 10: Comparison of South Africa's road freight transport cost composition by component in 2015, 2025 and 2026.
Source: Logistics Cost Model for South Africa (2015; 2025 estimate; 2026 forecast).

Fuel remains the largest component and increases from 39.1% of road freight expenditure in 2015 to an estimated 43.4% in 2025, a rise of 4.3 percentage points. Over the same period, the share attributable to truck driver wages declines from 18.9% to 16.7%, and depreciation falls from 15.0% to 14.2%. The cost-of-capital share rises modestly from 5.8% to 6.4%, while insurance remains at 7.8% in both years.

Together, fuel, truck driver wages and depreciation account for 73.0% of road freight expenditure in 2015 and 74.3% in 2025. The figures therefore show a persistent concentration of expenditure in a small number of components, even as their relative importance changes. A falling share of costs should not be confused with falling nominal expenditure: it may simply mean that the component has grown more slowly than total road freight costs.

Road and rail freight rates relative to inflation and diesel prices

Figure 11 compares the indexed movement in South Africa's road and rail freight rates with general inflation (CPI) and diesel prices between 2014 and 2026. By expressing all four indicators relative to a common 2014 base (2014 = 100), the figure illustrates how freight rates have changed relative to broader inflationary pressures and one of the transport sector's most significant operating cost drivers.

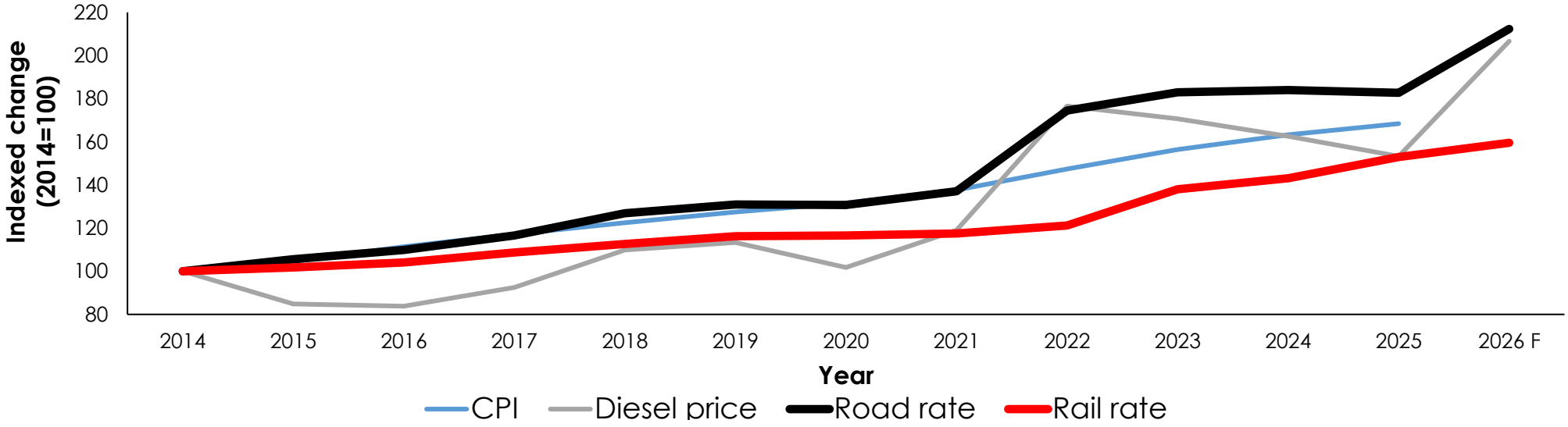

Figure 11: Indexed change in South Africa's road and rail rates compared to CPI and the diesel price (2014=100), 2014-2026.
Source: Logistics Cost Model for South Africa (2015; 2025 estimate and 2026 forecast).

Note: CPI and diesel price indices are shown to 2025, while road and rail freight rate indices extend to 2026. The 2026 freight rate values are forecasts.

Road freight rates have increased considerably faster than both rail freight rates and general consumer price inflation. Between 2014 and 2025, the road freight rate index increased by approximately 82%, compared with 68% for CPI and 53% for diesel prices. Road freight rates initially tracked CPI relatively closely, but diverged more noticeably from 2022 onwards, coinciding with a sharp increase in diesel prices. Diesel prices peaked in 2022 before declining substantially through 2025, while road freight rates remained elevated. This divergence suggests that road freight pricing is influenced by more than fuel costs alone, potentially reflecting sustained pressure from other operating expenses, including vehicle maintenance, labour, insurance and capital-related costs, as well as broader market and pricing conditions. Importantly, freight rates represent the prices charged for transport services rather than the underlying costs incurred by operators, and their movement should not be interpreted as a direct measure of operating efficiency.

The divergence is projected to become even more pronounced in 2026, when the road freight rate is forecast to **more than double (112%) relative to 2014**. In contrast, rail freight rates are forecast to increase by 60% over the same period. Although rail freight rates have also risen, particularly since 2022, their comparatively moderate growth has widened the gap between road and rail freight rate trends. The 2026 forecasts are compared with CPI and diesel price trends available up to 2025, rather than equivalent 2026 forecasts.

These diverging trends have important implications for South Africa's logistics system. Given the country's substantial reliance on road transport, sustained increases in road freight rates contribute to upward pressure on the national logistics bill. The slower growth in rail freight rates points to potential opportunities for improving transport affordability through greater rail utilisation, particularly for long-distance, high-volume freight movements. Lower growth in rail rates, however, does not automatically translate into greater cost competitiveness. Actual modal competitiveness depends on the rates charged, service reliability, transit times, network accessibility and additional handling or transfer costs. Realising rail's potential cost advantages therefore requires not only competitive pricing, but also reliable services, sufficient capacity and improved access to the network, reinforcing the importance of ongoing freight rail reform and revitalisation.

Diverging trends in road and rail freight vehicle fleets

Beyond the relative changes in road and rail freight rates, the longer-term development of South Africa's freight transport asset base provides further insight into the structural challenges facing the logistics system. In particular, changes in the number of road freight vehicles and railway locomotives illustrate the contrasting trajectories of the two transport modes and help contextualise the country's increasing dependence on road freight. South Africa has experienced substantial growth in its road freight vehicle fleet over the past 15 years, particularly in the number of trucks and trailers.

As illustrated in **Figure 12**, this growth has considerably outpaced both the change in the locomotive fleet and, in several vehicle categories, real economic growth (measured by GDP at constant prices).

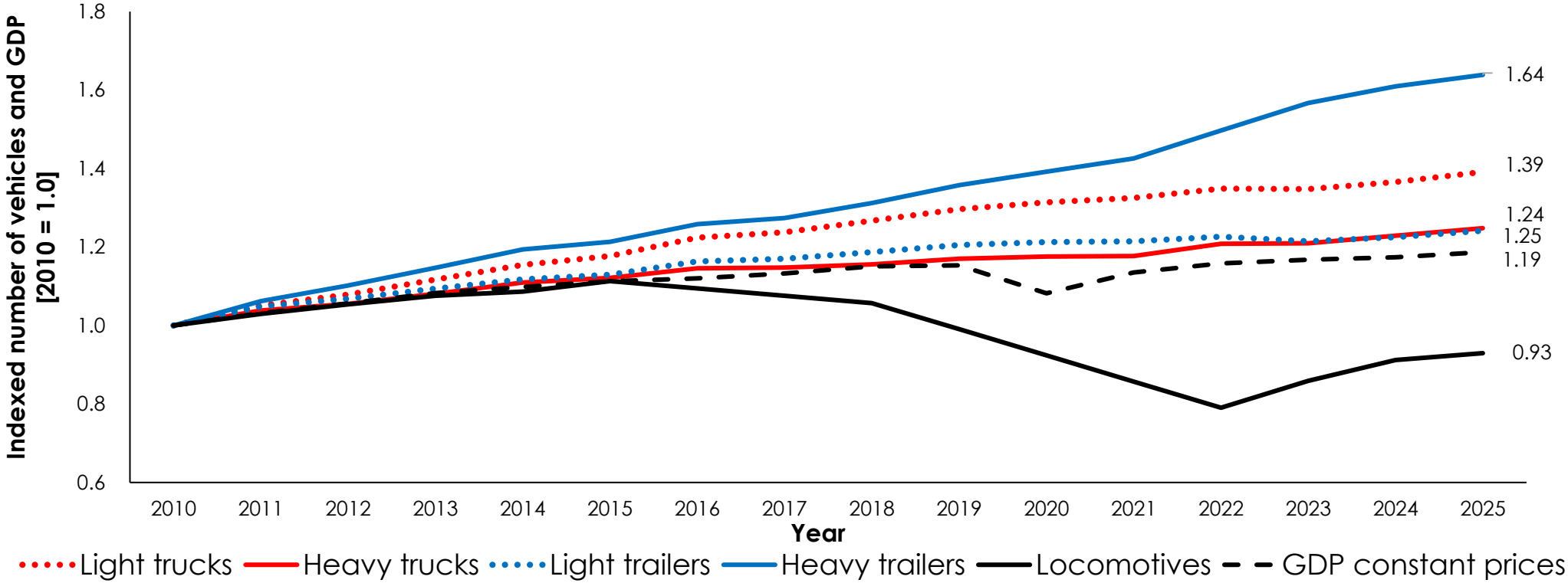

Figure 12: Indexed change in South Africa's road freight vehicle and locomotive fleets compared with real GDP (2010=1.0), 2010–2025.
Source: eNaTIS Live Vehicle Population data (2010-2025)[14] for road truck and trailer fleets; Transnet Integrated Reports (2010-2025)[15] for locomotives; and World Bank (2010-2025)[16] for GDP constant prices.

The divergence is particularly pronounced for heavy trailers, which increased by approximately 64% over the indexed period, followed by light trucks (39%), heavy trucks (25%) and light trailers (24%). By comparison, real GDP increased by approximately 19%, while the number of locomotives declined by approximately 7%. More frequent observations of longer heavy trucks on the country's roads, i.e. single-horse heavy trucks hauling more than one heavy trailer, are also worth noting.

These trends highlight a growing imbalance in the development of South Africa's road and rail freight transport assets. Although changes in fleet numbers do not directly measure capital investment, utilisation or operational capacity, the sustained expansion of road freight vehicles alongside a declining locomotive fleet is consistent with the structural shift towards greater road freight dependence.

Restoring rail's contribution to South Africa's logistics system will require not only competitive rates but also sustained investment in rail network infrastructure maintenance and rolling stock, improved operational reliability, and sufficient capacity to attract freight volumes from road to rail where economically appropriate.

Implications for South Africa's logistics costs

The combined analysis demonstrates that road freight costs are affected by both volatile expenditure categories, particularly fuel, and longer-term pressures associated with capital investment, vehicle ownership, labour, maintenance and other operating requirements. Containing avoidable costs therefore calls for attention to vehicle utilisation, loading and routing efficiency, preventive maintenance, asset productivity and reliable freight operations – not only fuel management.

At system level, the findings also reinforce the importance of improving rail competitiveness and allocating freight to the mode best suited to its characteristics. These measures can contribute to reducing avoidable transport costs, although the national cost trends alone do not quantify the savings achievable from any individual intervention.

How do freight transport costs affect different sectors of the economy?

Figure 13 on the next page illustrates the distribution of South Africa's freight transport costs across domestic, export and import flows, tracing the movement of goods from extraction and production through intermediate and final manufacturing to consumption. The perspective provided by the figure highlights the interconnected nature of freight transport and its importance throughout the economy's production and consumption activities.

Domestic freight movements accounted for approximately 71% of total freight transport costs in 2025, reflecting the substantial transport requirements associated with moving goods between production stages and ultimately to consumers. The largest individual cost component is the movement of goods from final manufacturing to consumption (31%), followed by movements from extraction to intermediate manufacturing (27%) and from intermediate to final manufacturing (13%). These flows demonstrate the importance of efficient domestic transport networks in supporting industrial production, distribution and consumer markets.

International freight movements account for the remaining approximately 28% of transport costs, comprising **16% of costs associated with exports and 12% of those associated with imports**. Export-related transport costs are concentrated at the extraction stage (13% of total transport costs), highlighting the importance of freight connectivity for South Africa's primary production sectors, particularly mining and agriculture. Import-related costs are more concentrated towards the latter stages of the value chain, particularly final manufacturing (7%) and consumption (4%). These patterns underscore the dependence of domestic industries on reliable international supply chains, efficieint port operations and effective interfacing inland transport connections.

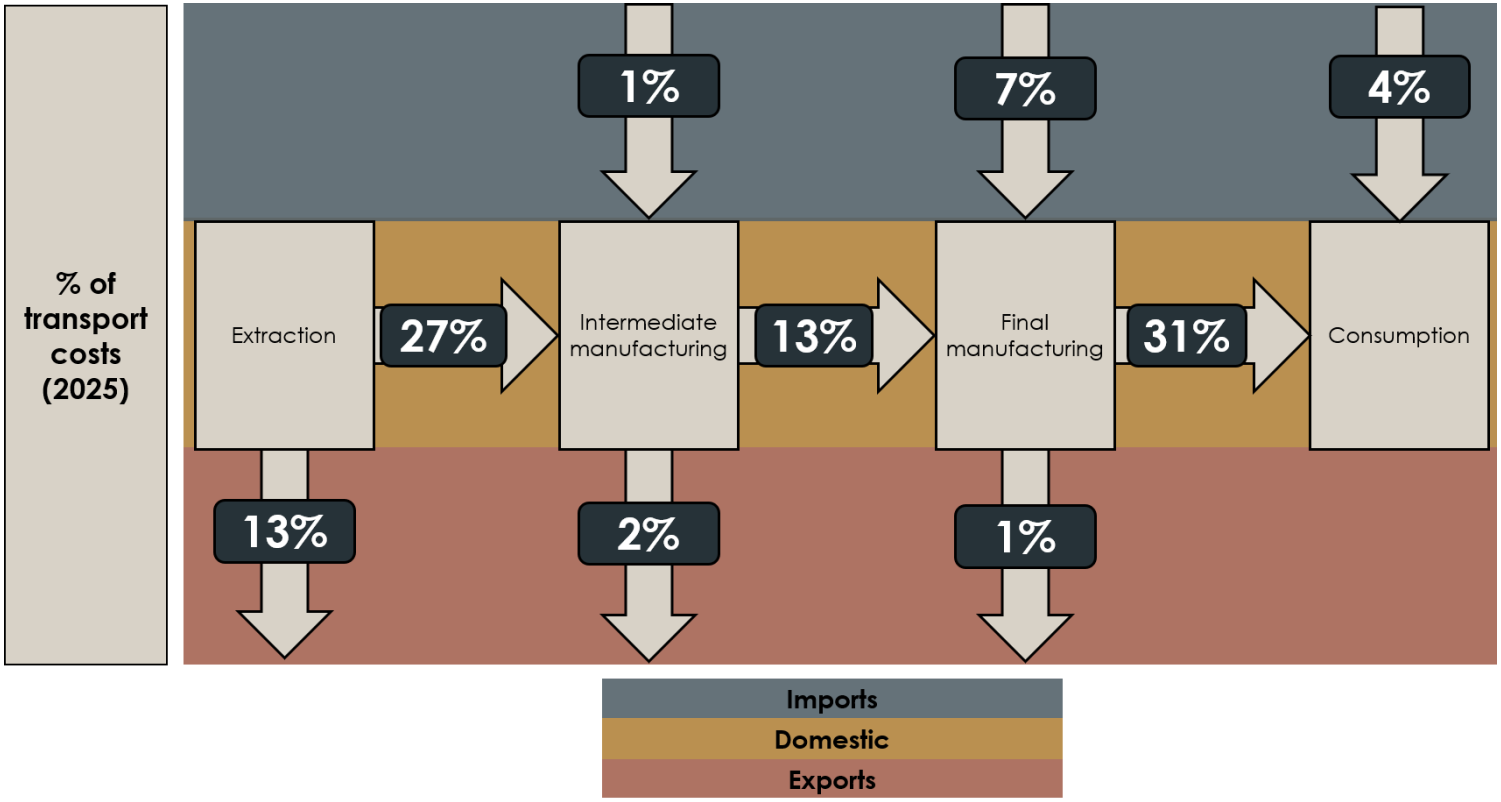

Figure 13: South Africa's freight transport cost composition by freight flow type in 2025 – shown as percentage of total.
Source: Logistics Cost Model for South Africa (2025 estimate).

Note: Percentages are rounded and therefore do not sum to exactly 100%.

The significance of these transport flows extends beyond their direct costs. **Logistics performance failures can disrupt production, constrain exports and increase inventory requirements, with broader consequences for economic growth and household welfare, ultimately undermining South Africa's economic resilience and competitiveness.** Because freight transport connects successive stages of economic activity, disruptions at one point in the logistics chain can have consequences throughout the wider economy. The effects also differ between sectors, depending on their freight intensity, reliance on particular transport modes, sensitivity to delays and exposure to international markets.

Table 3 summarises the principal ways in which logistics performance failures affect key sectors of the South African economy.

Table 3: Potential economic consequences of logistics performance failures across different sectors of the South African economy.

Sector	Immediate logistics impact	Wider economic consequence
Mining	Rail capacity constraints, stockpile accumulation and mismatches between inland deliveries and vessel availability.	Constrained production and exports, reduced mineral sales, lower royalties, foreign exchange flows, and tax revenues, and declining activity among contractors and suppliers.
Agriculture	Missed shipping windows, cold-chain disruptions, seasonal transport bottlenecks and inadequate access to export logistics.	Product deterioration, food wastage, lower farm-gate returns, reduced export earnings, pressure on food prices and risks to rural employment and incomes.
Manufacturing	Unreliable inbound deliveries and outbound distribution, longer lead times and increased safety-stock requirements.	Lower capacity utilisation, higher production and inventory costs, reduced export competitiveness and weaker investment incentives.
Retail and fast-moving consumer goods (FMCG)	Longer replenishment cycles, inconsistent delivery schedules, congestion and increased distribution uncertainty.	Higher inventory and distribution costs, product shortages and potential increases in consumer prices.
Public sector and communities	Accelerated road deterioration, congestion, road safety risks and increased infrastructure maintenance requirements.	Pressure on public budgets, diversion of resources from other priorities, municipal liabilities and reduced quality of life.

Note: The sectoral consequences presented in Table 3 are illustrative and are not quantified by the freight transport cost shares in Figure 13.

These consequences illustrate why logistics performance should be assessed not only in terms of the direct costs of transporting goods, but also through its influence on productive capacity, trade competitiveness and economic resilience. For mining and agriculture, unreliable transport can restrict access to export markets and reduce the value realised from production. Manufacturing is exposed to disruptions in both inbound supply chains and outbound distribution, while retailers and consumers are particularly sensitive to delays and rising distribution costs. The public sector also absorbs indirect consequences through increased infrastructure maintenance requirements, congestion and road safety impacts.

The economic consequences of logistics failure are therefore broader than the transport costs captured in the national logistics cost model. While Figure 13 identifies where transport expenditure occurs across freight flows, it does not quantify the additional economic losses resulting from unreliable or inefficient logistics services. Such losses may include foregone production and exports, product deterioration, excess inventory, reduced investment and the diversion of public resources towards infrastructure repairs.

Improving South Africa's logistics performance consequently offers benefits beyond containing transport costs. More reliable rail services, efficient ports, resilient road infrastructure and better coordination across freight corridors can improve the performance of entire value chains, supporting industrial competitiveness, export growth and economic development.

The inherent drivers of high logistics costs in South Africa

South Africa's tonne-kilometre (tonne-km) freight demand is disproportionately high compared to the size of its economy and nearly three times worse than the world average. This is because its production centres are in the middle of the country, and its minerals are mined far from the coast. This spatial challenge means that the country relies heavily on its freight logistics system to be efficient to remain globally competitive (Havenga *et al*., 2021)[17].

According to the Freight Demand Model™ (FDM™) for South Africa, the South African economy had a freight demand of 790.1 million tonnes in 2024 (this includes road, rail, pipeline and conveyer belt freight). According to the long-term forecast included in the FDM™ 2024, this situation is expected to persist in the foreseeable future and reach a freight demand of 1 019 million tonnes by 2055.

Figure 14 provides an updated view of the country's freight demand for 2024 and forecast freight demand for 2055 and is indicative of the freight task that the country should prepare for and mobilise.

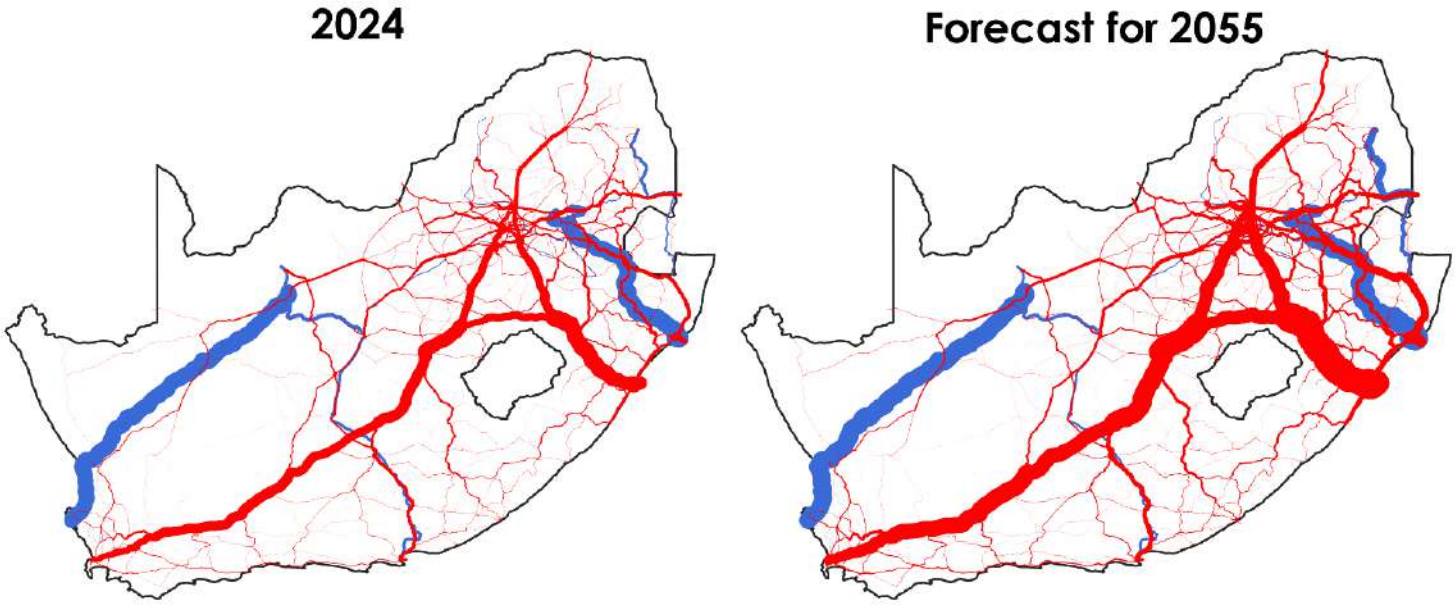

Figure 14: South Africa's current (left) and long-term future (right) general freight business and dedicated export line freight flows, which are indicated by red and blue lines respectively.
Source: Freight Demand Model™ for South Africa (2024; 2055 forecast).

Table 4 compares key freight demand figures for South Africa to reflect a decade of change using the most recent actual figures available (2024) and relevant actual figures from ten years prior (2014).

Table 4: Comparison between key freight demand figures for South Africa in 2014 and 2024.

Measure	Rail			Road		
	2014	2024		2014	2024	
Tonnes (millions)	218.1	156.4	⇩	484.5	506.6	⇧
Tonne-km including distribution and last mile (billions)	139.7	112.1	⇩	231.0	277.2	⇧
Average transported distance (km)	641	717	⇧	477	547	⇧

Source: Freight Demand Model™ for South Africa (2014; 2024).

Road and rail freight movement performance may be further analysed according to market segments in which freight tonnages are conveyed over distances by these modes. **Figure 15** provides maps of the different freight market segments/categories in South Africa. Note that these maps are illustrated on their own scale, with the red lines indicating road-based freight flows and the blue lines indicating rail-based freight flows.

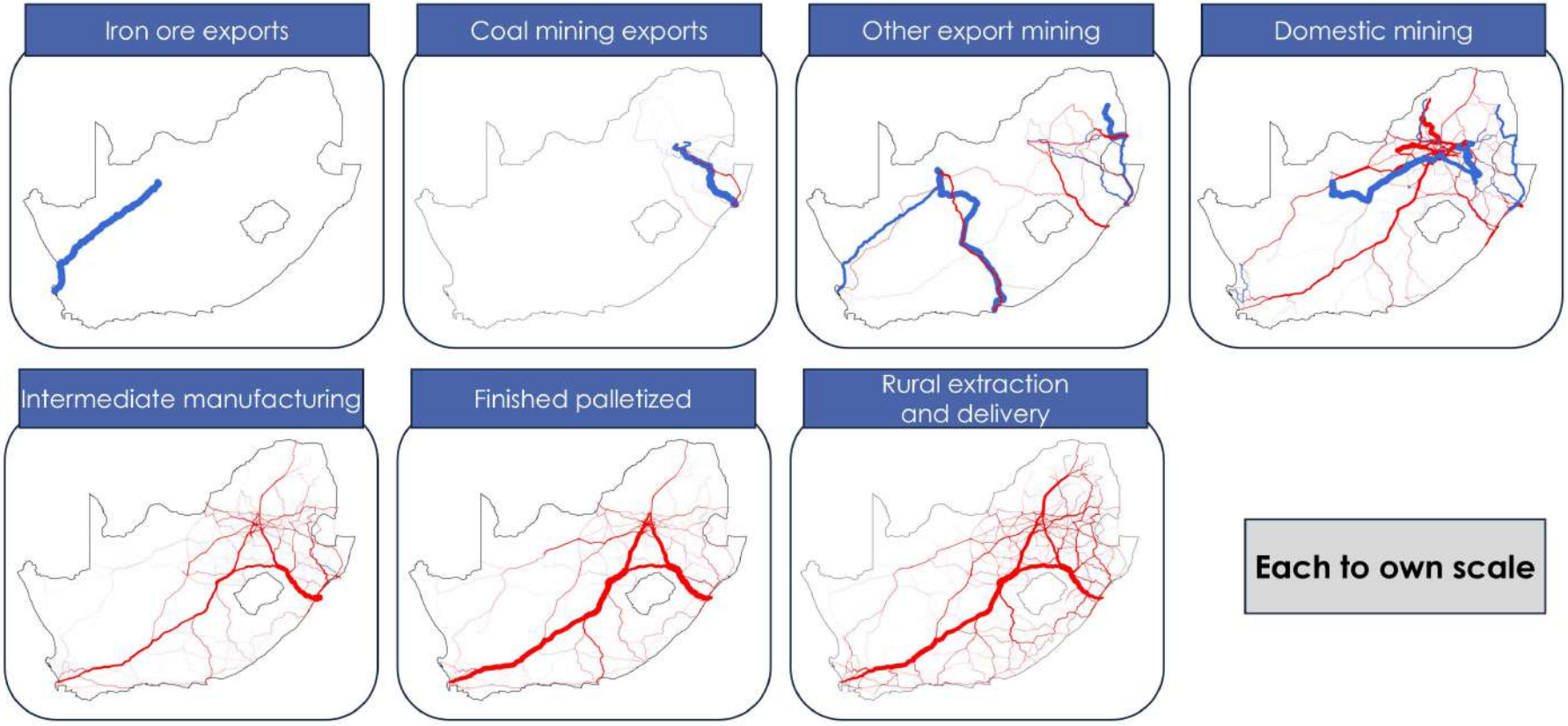

Figure 15: Maps of South Africa's freight market segments in 2025.
Source: Freight Demand Model™ for South Africa (2025 estimate).

The dominance of rail freight transport in mining ore exports is evident from these maps, as is the dominance of its road counterpart for other freight flows. The modal gap in South Africa's freight market is even clearer from **Figure 16**, which provides an overview of the gaps between current and target market shares for rail-friendly freight (measured as a percentage of tonne-km and actual tonnes), not only highlighting what road freight should be on rail, but also what should remain on road.

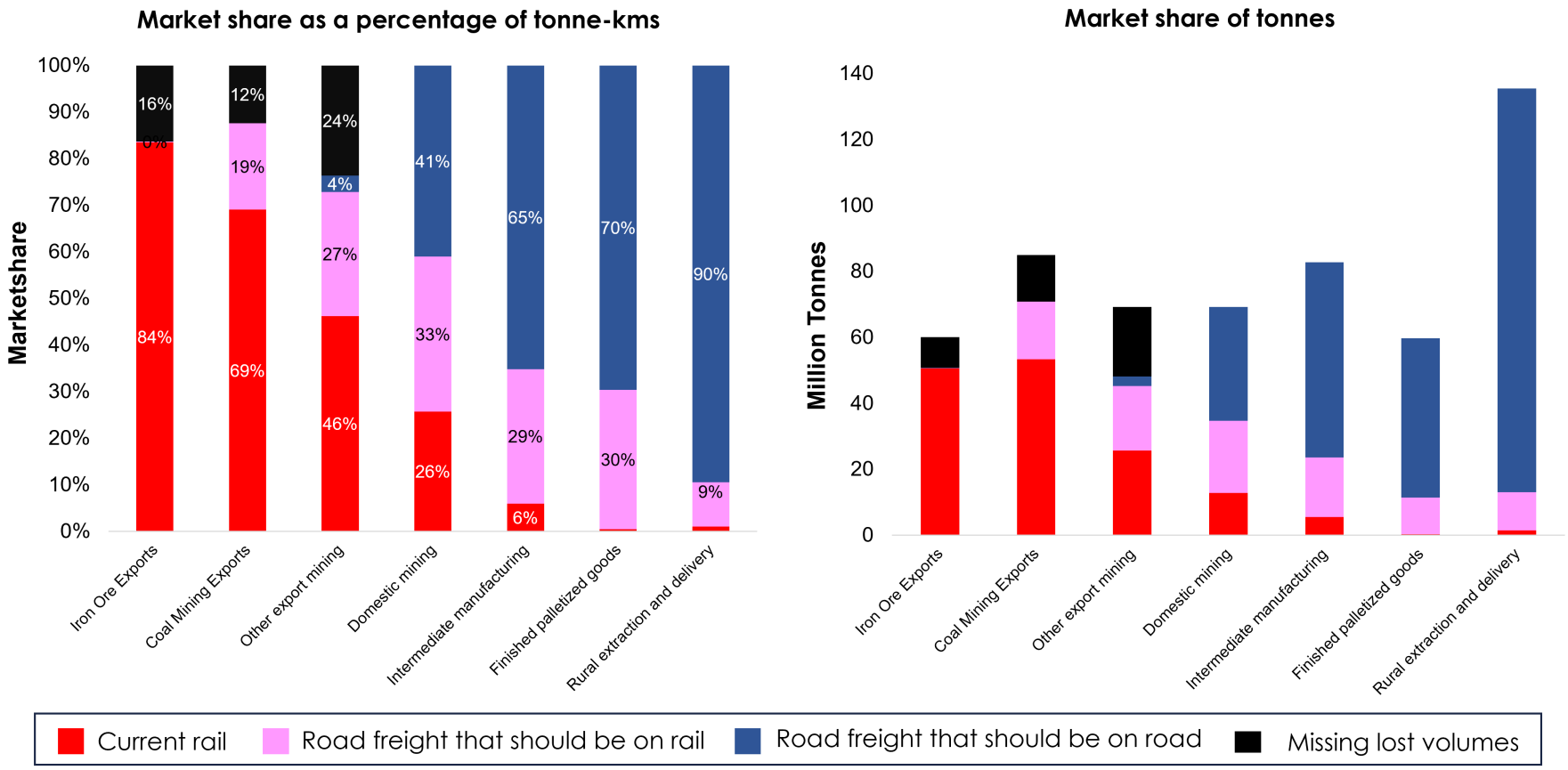

Figure 16: Freight market share in South Africa as a percentage of tonne-kilometres (left) and actual tonnes (right) in 2025.
Source: Freight Demand Model™ for South Africa (2025 estimate).

Missing lost volumes refer to rail-friendly freight that was not transported by rail and cannot be transported by road. For example, when lower volumes of export minerals were exported due to rail problems than what should have been exported.

The export mining gap mostly represents completely lost volumes and foreign income since most of the missing rail volumes cannot be recovered by road transport. While the missing domestic mining rail volumes can be recovered by road transport, doing so results in severely damaged rural roads. Similarly, the rail-friendly freight related to intermediate manufacturing and finished palletized goods being carried by road leads to congested road corridors. While most rural extraction and delivery freight should be moved by road, it requires world class access roads, which are severely lacking, to do so efficiently.

These rail market share gaps are largely caused by the country's sub-optimal modal choice, along with the national freight railway system's disruptions and failures. The cost of South Africa's freight railway and port systems' underperformance was initially quantified in an academic article authored by members of GAIN Group (Havenga *et al.*, 2023)[18]. This research determined that the combined system underperformance cost the South African economy a staggering R 504.8 billion, equal to 7.43% of GDP, in 2022. More than 90% of this cost (R458.4 billion, equal to 6.7% of GDP) was attributed to the national freight railway system's underperformance (which reached a trough at this time), with the remaining R46.4 billion (equal to just over 0.7% of GDP) being attributed to that of the port system.

This research led to the widely quoted estimate that inefficiencies in South Africa's logistics system cost the economy approximately R1 billion per day, a figure cited by President Cyril Ramaphosa during his address at the inaugural National Transport Conference on 16 March 2026.

GAIN Group has since revised the calculation of freight rail-related cost for 2022 (the peak cost year), from the initial R458.4 billion to a revised R410.7 billion (equal to 6% of GDP at the time), and completed this calculation for 2023, 2024 and 2025.

Table 5 summarises the effect of South Africa's freight railway system's underperformance (and the positive impact of recovery efforts) on the economy between 2022 and 2025.

Table 5: The overall economic effect of rail's underperformance in South Africa, 2022-2025.

Year	Cost (Rand billion)	Percentage of GDP	Cost per day (Rand million)
2022	410.7	6.0	1 125
2023	315.2	4.4	864
2024	274.7	3.8	753
2025 E	180.8	2.5	495

Source: Logistics Cost Model for South Africa (2022-2024; 2025 estimate).

Table 6 splits these overall costs into their two primary components, namely unachieved bulk mineral exports and transport inefficiencies.

- The first cost component stems from bulk mineral (coal and iron ore) export opportunities that are lost due to rail disruptions or failures because road transport cannot be used to move the missing rail volumes for these commodities.

- The second cost component stems from transport inefficiencies caused by using road transport to move freight volumes that should have been moved on rail more efficiently (i.e. at a lower cost).

Table 6: Economic cost of rail underperformance: lost bulk mineral exports and transport inefficiencies, 2022–2025.

Year	Unachieved bulk mineral exports		Transport inefficiencies	
	Economy Cost (Rand billion)	% of total effect	Economy Cost (Rand billion)	% of total effect
2022	315.5	77%	95.2	23%
2023	219.9	70%	95.3	30%
2024	175.8	64%	98.9	36%
2025 E	88.4	49%	92.4	51%

Source: Logistics Cost Model for South Africa (2022-2024; 2025 estimate).

As depicted in the table, the high cost to the economy in 2022 was mostly due to unachieved minerals exports, representing 77% of the overall cost. Due to changing commodity prices, exchange rates, and the increased rail volumes of mineral exports available for transport, the loss for unachieved mineral exports decreased to R88.4 billion in 2025, representing 49% of the loss in comparison. While the cost of unachieved mineral exports decreased, it is evident that the cost of transport inefficiencies remains a concern.

The estimates include both the direct economic effects of rail underperformance and the wider effects captured through economic multipliers, and therefore should not be interpreted as direct logistics expenditure alone. For example, the R92.4 billion attributed to transport inefficiencies in 2025 comprises R46.2 billion in additional direct transport costs, increased by a multiplier of two to reflect the wider economic effect.

While the continued decline in the cost of the national freight rail system's underperformance is consistent with early operational recovery, persistent issues continue to undermine the growth and competitiveness of the national economy. It should also be noted that changes to the country's port underperformance require further investigation, because the initial calculation of port disruptions and failures is still to be revised and updated.

From reform to lower logistics costs: a freight system in transition

The findings of the ***State of Logistics™ 2026 for South Africa*** demonstrate that South Africa's logistics cost challenge extends beyond rising fuel prices, transport rates and other operating expenses and requires systemic consideration. **A significant part of the country's logistics cost burden is linked to structural inefficiencies, inappropriate modal choices and unreliable freight services.** Addressing these challenges requires improvements in how freight is transported, supported by the ongoing transformation of South Africa's freight logistics system.

The consequences of freight rail underperformance are particularly significant. As established earlier in this report, the economic effect attributable to rail underperformance was estimated at R180.8 billion in 2025, comprising R92.4 billion in transport inefficiencies and R88.4 billion in unachieved bulk mineral exports. While the latter represents foregone economic opportunities rather than direct logistics expenditure, both demonstrate the substantial economic value that could be unlocked through improved rail performance – and the significant contribution that emerging train operators could make in various market segments.

Recovery and reform: necessary, but not sufficient

South Africa's freight rail system experienced a prolonged deterioration, with Transnet's transported volumes declining from approximately 226.3 million tonnes in 2017/18 to 149.5 million tonnes in 2022/23. This deterioration increased dependence on road transport, including for long-distance and high-volume freight more suited to rail. The consequences extended beyond higher transport expenditure to increased road infrastructure deterioration, supply-chain uncertainty and additional inventory requirements.

These structural weaknesses were compounded by successive domestic and international disruptions between 2016 and 2026, including the COVID-19 pandemic, infrastructure failures, extreme weather events and geopolitical instability. Together, these developments exposed the vulnerability of South Africa's freight system to external shocks and contributed to increasing logistics cost pressures.

The severity of the crisis accelerated government-led recovery efforts and institutional reform. The White Paper on National Rail Policy (2022), establishment of the National Logistics Crisis Committee in 2023 and adoption of the Roadmap for the Freight Logistics System in December 2023 established foundations for restoring rail performance, introducing third-party network access and increasing private sector participation.

Early signs of operational recovery are evident. Rail freight volumes increased to approximately 167.9 million tonnes in the 2025/26 financial year. However, as illustrated in **Figure 17**, the recovery remains incomplete, and the benefits of structural reform have yet to be fully realised.

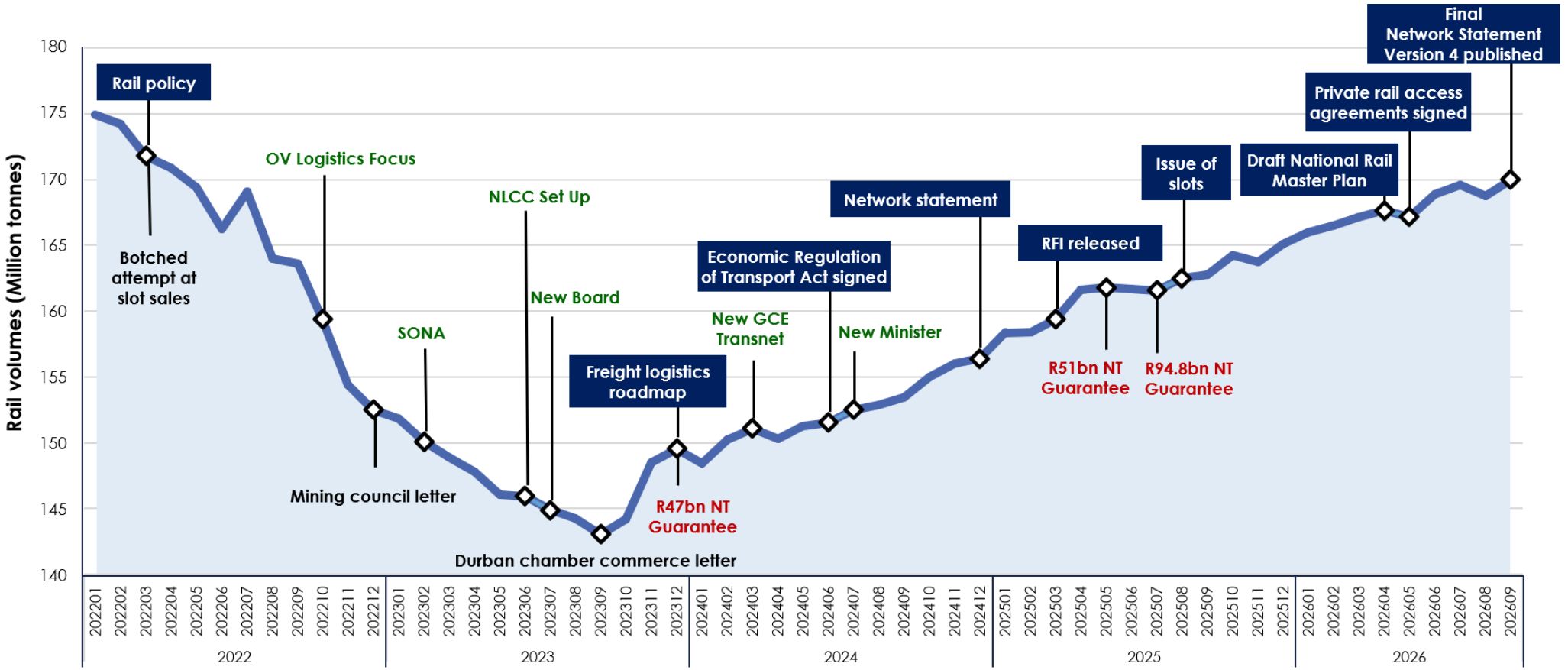

Figure 17: Rolling 12-month rail freight volumes and selected policy, institutional and operational reform milestones.

The timeline demonstrates that institutional reform and improvements in rail freight volumes do not necessarily occur simultaneously. Although network access agreements have been concluded with eleven private train operating companies, their full operational contribution is expected to materialise beyond the current reporting period. Higher rail volumes will not automatically reduce logistics costs unless they translate into reliable services, competitive transport costs and a more appropriate allocation of freight between road and rail.

Reform should therefore be evaluated not merely by policy implementation or the recovery of rail volumes, but by its ability to reduce avoidable logistics costs across the system.

Closing the remaining rail market gap

The scale of the remaining challenge is illustrated in **Figure 18**, which compares historical rail freight volumes with the longer-term volumes identified as desirable for 2035 and 2055. These amount to approximately 250 million tonnes and 320 million tonnes, respectively.

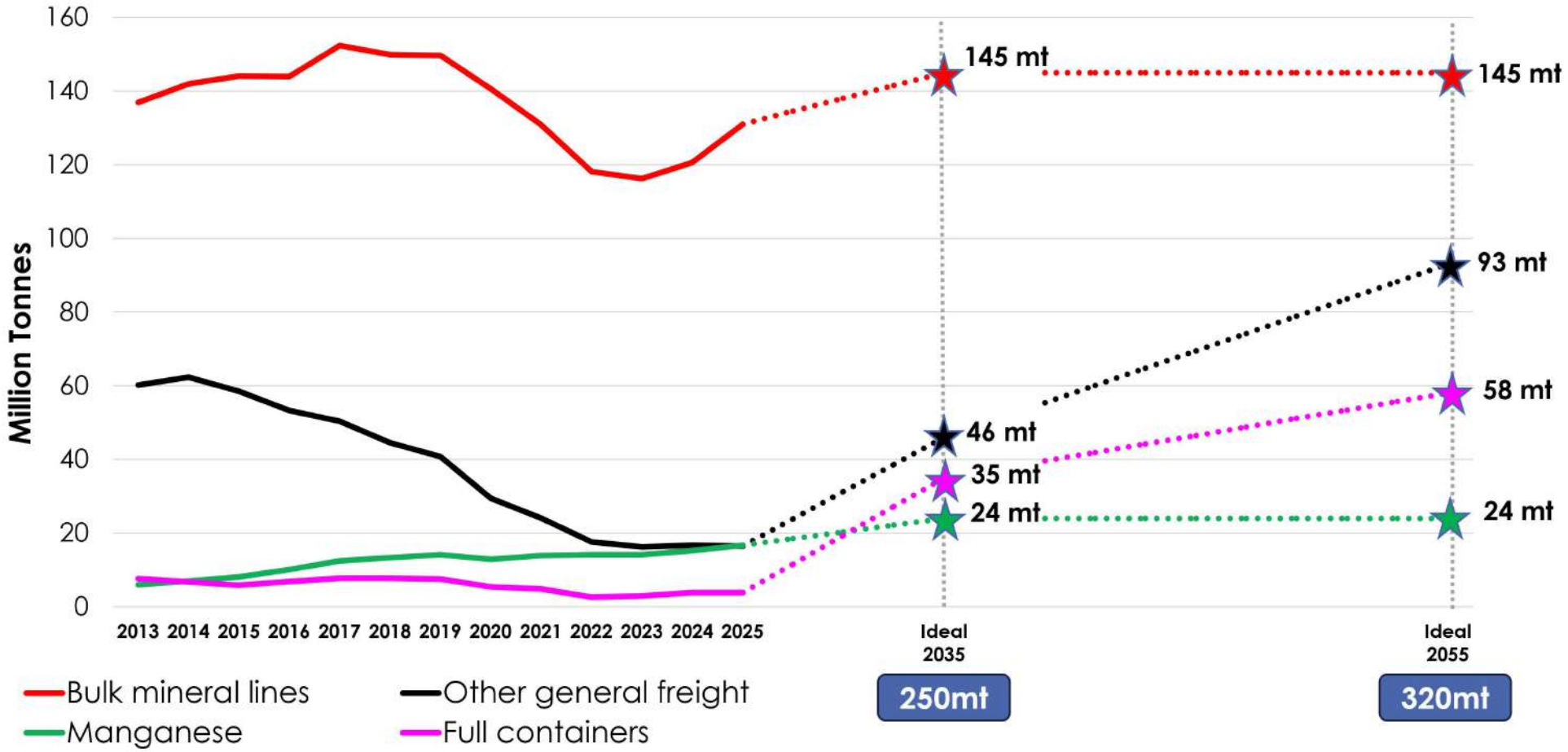

Figure 18: South Africa's recent freight rail volumes (2013-2025) compared to its ideals for 2035 and 2055.
Source: Freight Demand Model™ for South Africa (2013-2024, 2025 estimate; 2035 and 2055 forecast).

A particularly significant gap exists in containerised freight and other general freight (total freight excluding bulk mineral lines and manganese export freight). Although the recovery of established bulk commodity corridors remains important, South Africa's longer-term freight requirements cannot be met without rebuilding competitive general freight rail services.

This will require more than institutional reform and improved utilisation of existing infrastructure. Sustained investment in railway infrastructure, rolling stock, intermodal terminals and supporting logistics facilities is essential, together with reliable access arrangements and effective coordination between freight operators, infrastructure managers and customers.

A competitive railway must also be integrated with road transport rather than viewed as a complete substitute for it. Road freight remains indispensable for distribution, shorter-distance movements and first- and last-mile connectivity. The opportunity lies in road-rail complementarity and using each mode where it can deliver the greatest overall economic benefit.

The ultimate measure of South Africa's freight logistics transformation will therefore be whether it reduces the unnecessary cost associated with moving freight through the economy. Progress should be assessed through improvements in modal allocation, cost per tonne-kilometre, service reliability, infrastructure utilisation and supply-chain performance, rather than rail freight volumes alone.

Conclusion: Reducing the cost of moving South Africa

The ***State of Logistics™ 2026 for South Africa*** reveals the magnitude of South Africa's freight logistics challenge. National logistics costs are projected to reach R1.156 trillion in 2026, equivalent to 14.6% of GDP, with transport accounting for approximately 59% of the total. Although some of this expenditure is an unavoidable consequence of South Africa's geography, economic structure and freight intensity, a substantial opportunity exists to reduce unnecessary costs through improved system performance.

Reducing these costs requires a coordinated approach across three complementary levels: appropriate modal choice, effective transport operations and efficient transport operations.

1. The right mode: moving freight where it makes the most economic sense

The first priority is to ensure that freight is transported using the most appropriate mode. Long-distance, high-volume and rail-friendly freight should be moved from road to rail where rail can offer a reliable and more economical service, while road transport should continue serving the freight markets and distribution functions for which it is best suited. Appropriate modal choices may also be enhanced through careful spatial planning and development of inland terminal, consolidation hubs or freight villages close to points of production and consumption to reduce the required transport distances.

Supply chain optimisation and corresponding choice of transport mode requires an economically justified modal shift, supported by competitive rail services, sufficient capacity and efficient road–rail interfaces. The objective is not simply to maximise rail's market share, but to minimise the overall cost of transporting freight across the logistics chain.

2. Effective operations: making better use of transport capacity

Once the appropriate mode has been selected, the next priority is to maximise the productive use of available transport capacity.

For road freight, effectiveness concerns how much freight is moved by each productive vehicle movement. Optimal load factors, appropriate vehicle selection, load consolidation, improved scheduling (including synchronisation with rail, ports and terminals operations) and more effective backhaul arrangements can reduce empty running and unnecessary vehicle-kilometres.

Moving the same freight demand with fewer underutilised trips reduces the expenditure required on fuel, labour, maintenance and fleet capacity. These improvements must, however, be achieved within legal loading limits and without compromising service reliability or creating disproportionate inventory and excessive road maintenance costs.

3. Efficient operations: reducing the cost of each tonne-kilometre

Even when freight is transported on the right mode at effective load factors, further opportunities remain to reduce the resources consumed in moving it.

For road transport, operational efficiency concerns how economically each tonne-kilometre is produced. Improved driving behaviour, preventative vehicle maintenance, tyre management, route optimisation, reduced idling and effective fleet management can lower fuel consumption, maintenance expenditure and vehicle operating costs while improving safety and reliability.

These measures are especially important given the substantial contribution of fuel, labour, depreciation and other vehicle-related expenses to South Africa's road freight cost structure.

Rail efficiencies depend primarily on maintenance capability, the quality of track infrastructure, signalling and rolling stock, reliable execution and utilisation of assets. The success of future rail efficiency requires multiple train operator synchronisation across shared infrastructure – and more critically, market innovation and logistics integration to fulfil a core freight task within customers' value chains.

From higher volumes to lower logistics costs

These three levels of improvement are interconnected. Appropriate modal choice reduces unnecessary dependence on expensive transport alternatives; effective loading reduces the number of vehicle movements needed to satisfy freight demand; and efficient

operations reduce the resources consumed during those movements. The benefits also extend beyond direct transport costs. Greater freight-system reliability can reduce inventory requirements, avoid production and export disruptions, improve asset utilisation and strengthen supply-chain competitiveness.

South Africa's ongoing freight logistics reforms provide an important opportunity to address these challenges, but their success will ultimately depend on measurable reductions in avoidable logistics expenditure and improvements in service performance.

The central objective is straightforward: move freight on the right mode, maximise the productive use of transport capacity, and make every tonne-kilometre as efficient as possible. Achieving this will require government, infrastructure managers, rail and road freight operators and freight owners to focus not only on moving more freight, but on moving it more effectively, efficiently and reliably. **This is how South Africa can begin to reduce the unnecessary cost of moving its economy.**

A scenario was developed to assess what national logistics costs as a percentage of GDP could have been, had these three levels of improvements been realised from 2022. The scenario uses only the direct transport cost savings associated with improved rail performance, excluding multiplier effects. It also assumes a 10% efficiency saving on the road transport costs remaining after modal shift, together with additional savings from reduced port-related road transport inefficiencies and delays.

The resulting scenario, presented in **Table 7**, illustrates the potential reduction in the national logistics cost these combined improvements could have resulted in.

Table 7: National logistics costs under an improved logistics scenario, 2022–2026.

Year	Logistics costs		Logistics costs as a percentage of GDP	
	Identified avoidable costs	Costs remaining under the improved scenario	Baseline	Improved scenario
2022	R121.5 bn	R686.7 bn	12.1%	10.3%
2023	R129.2 bn	R791.9 bn	13.1%	11.3%
2024	R134.0 bn	R838.0 bn	13.2%	11.4%
2025 E	R133.5 bn	R875.6 bn	13.2%	11.5%
2026 F	R149.3 bn	R1 006.6 bn	14.6%	12.7%

Source: Logistics Cost Model for South Africa (2022-2024; 2025 estimate and 2026 forecast).

GDP is held at its baseline, but a more reliable and efficient logistics system could also support additional economic growth by enabling production, trade and investment, and thus improve this metric even more.

Table 7 and **Figure 19** distinguish between the logistics costs that could be avoided through the identified improvements and those that would remain under the improved scenario.

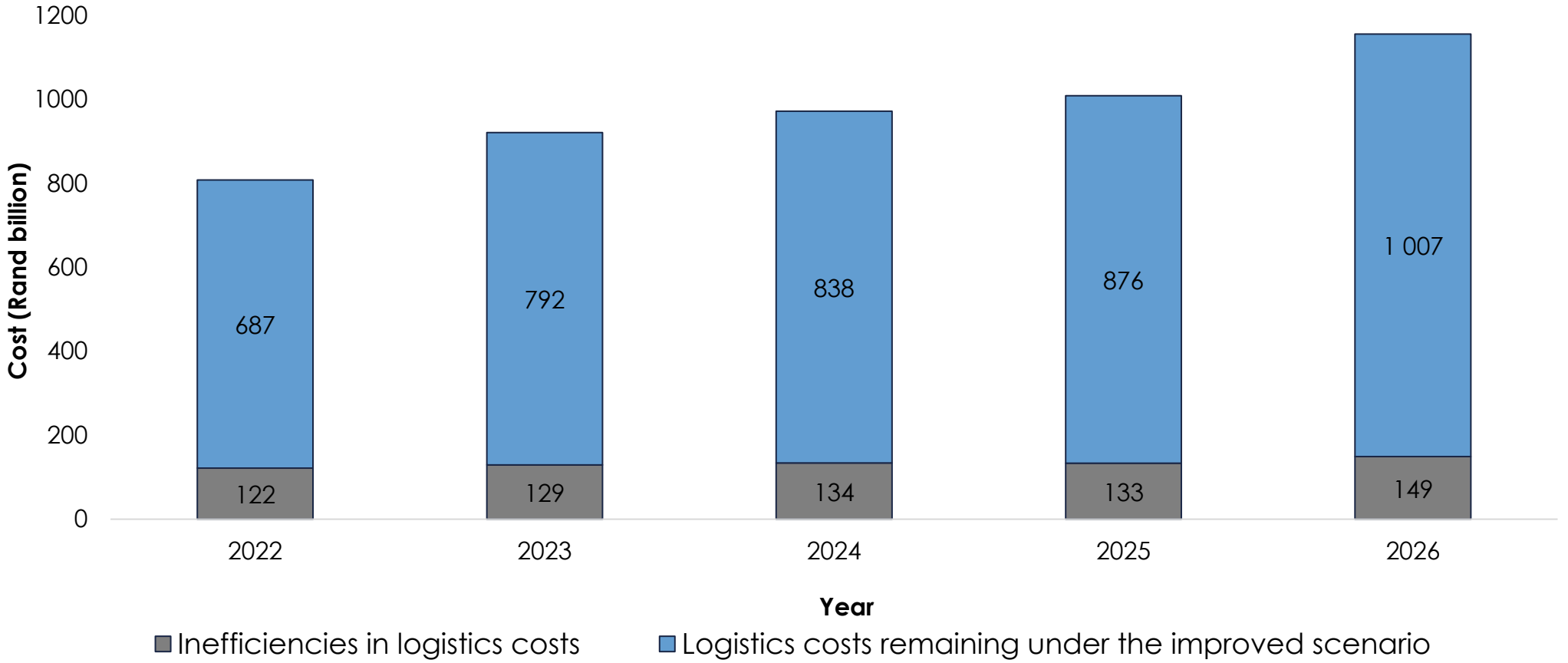

Figure 19: National logistics costs: identified avoidable costs and costs remaining under the improved scenario, 2022–2026.
Source: Logistics Cost Model for South Africa (2022-2024; 2025 estimate and 2026 forecast).

Potential annual savings increase from R121.5 billion in 2022 to a forecast R149.3 billion in 2026. These represent substantial opportunities to reduce the national logistics cost burden through improved rail performance, greater road transport efficiency and reduced port-related delays.

The costs remaining under the improved scenario also increase, however, from R686.7 billion in 2022 to a forecast R1 006.6 billion in 2026. Addressing the identified inefficiencies would therefore deliver considerable savings, but would not prevent the broader rise in logistics costs.

The comparison with GDP illustrates both the value and the limits of these improvements. Under the improved scenario, logistics costs would have been 10.3% of GDP in 2022, compared with the baseline of 12.1% as shown in **Figure 20**. By 2026, the corresponding forecast values are 12.7% and 14.6%. The identified improvements could therefore reduce the logistics cost burden by approximately 1.7 to 1.9 percentage points of GDP over the period.

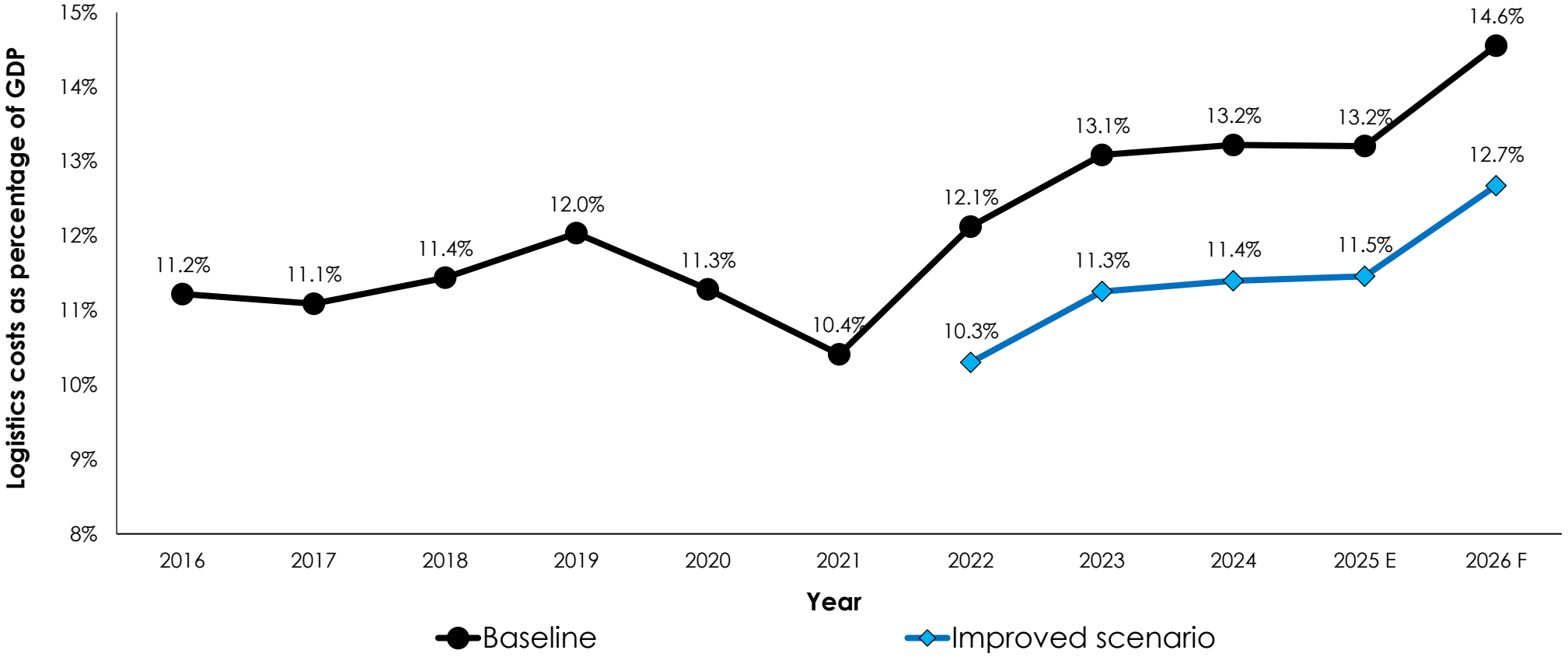

Figure 20: National logistics costs as a percentage of GDP: baseline and improved scenario.
Source: Logistics Cost Model for South Africa (2022-2024; 2025 estimate and 2026 forecast).

Nevertheless, logistics costs would still rise relative to GDP under the improved scenario. This indicates that the identified inefficiencies alone do not explain the increasing burden: even after these costs are removed, the remaining logistics costs grow faster than the value generated by the economy. The challenge is therefore both to improve logistics performance and to achieve stronger economic growth relative to the cost of supporting that activity. A more reliable and efficient logistics system could also enable additional production, trade and investment, potentially reducing the ratio further through stronger economic growth.

The identified avoidable logistics costs decline as a share of total logistics costs, from 15.0% in 2022 to an estimated 13.2% in 2025 and a forecast 12.9% in 2026 as shown in **Figure 21**.

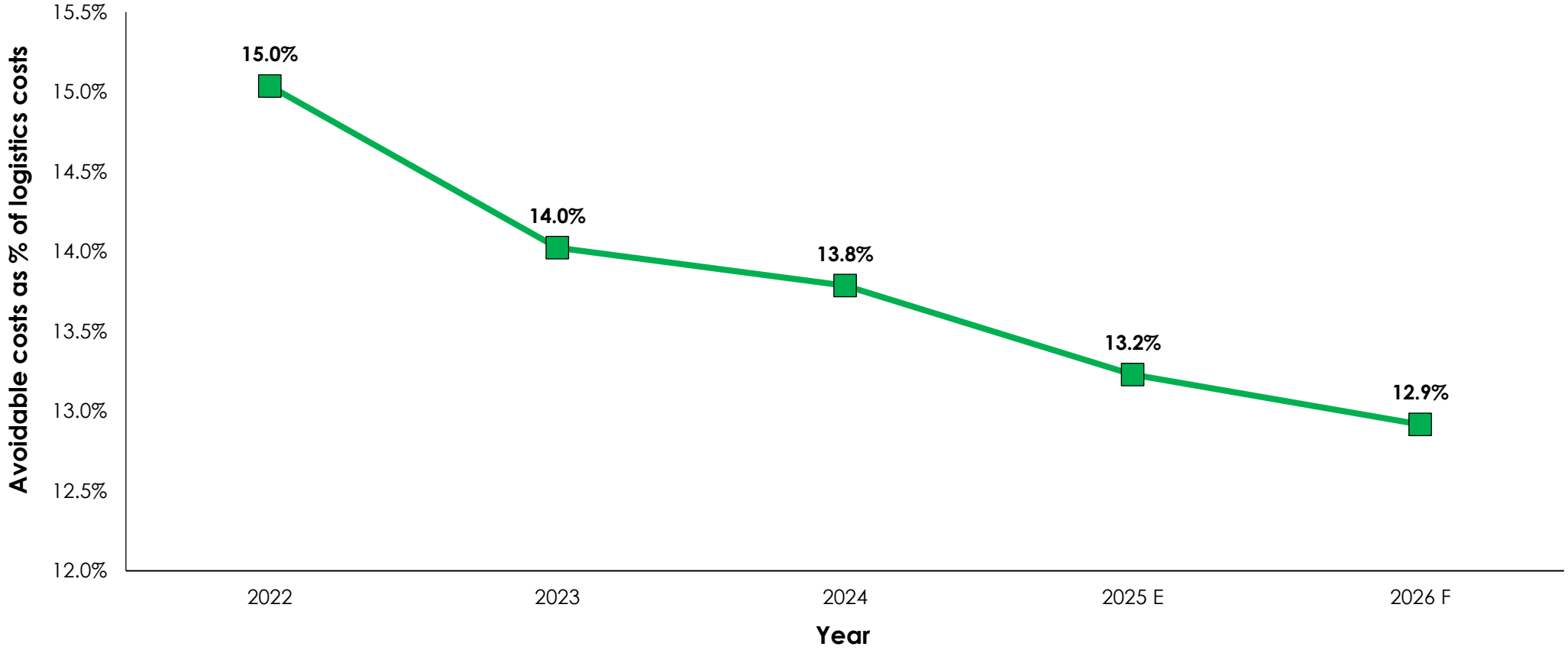

Figure 21: Identified avoidable costs as a percentage of total logistics costs, 2022–2026.
Source: Logistics Cost Model for South Africa (2022-2024; 2025 estimate and 2026 forecast).

This is a positive finding in relative terms: the inefficiencies addressed by the scenario account for a progressively smaller proportion of the national logistics cost bill. This declining share does not, however, mean that the rand cost of these inefficiencies is falling. Rather, the remaining logistics costs grow faster than the identified avoidable costs. Changes in the composition of economic and freight activity may also contribute to this trend, particularly where activity shifts away from industries with greater potential to benefit from modal shift. The results therefore show a smaller relative burden from the identified inefficiencies, alongside a continuing need to reduce their large absolute cost.

The role of government

Realising the savings illustrated in **Table 7** requires action by both the private and public sectors. Freight operators and cargo owners make many of the operational and investment decisions, while government shapes the infrastructure, planning and regulatory conditions that enable these improvements. **Table 8** summarises government's enabling role across the three complementary levels: economically justified modal shift, effective operations and efficient operations.

Table 8: Government's enabling role across the three levels of logistics improvement.

Level of improvement	Government's enabling role
Economically justified modal shift	Plan rail capacity, intermodal terminals, port access and first- and last-mile connections together.
Effective operations	Align land-use planning with warehouse, distribution centre and terminal locations to reduce freight distances and enable consolidation.
Efficient operations	Maintain roads, improve rural access and enforce loading limits consistently.

Responsibility for these conditions is spread across national, provincial and local government and state-owned entities. Delivering the improvements therefore requires coordinated freight and land-use planning, clear responsibilities and sustained collaboration across these institutions. Regular measurement of logistics costs and performance at national and provincial level can help identify priorities, guide investment and assess whether interventions are delivering the savings illustrated by the improved logistics scenario.

Looking ahead

The State of Logistics 2026 for South Africa shows that the country's logistics cost burden is at its highest level in more than two decades, but also that a substantial part of expenditure is avoidable. With freight moving on the right mode, transport capacity used effectively and operations run efficiently, national logistics costs could be reduced by an estimated R149.3 billion in 2026, and by approximately R668 billion over the five years from 2022. Yet logistics costs would still rise relative to GDP, demonstrating the need to combine better logistics performance with stronger economic growth.

No single intervention will achieve this. It requires government, infrastructure managers, rail and road freight operators and freight owners to work towards the same objective, supported by reliable evidence on where logistics costs arise and how they change over time. By re-establishing a regular national measure of logistics costs, the State of Logistics aims to provide that evidence. Future editions will show whether the cost of moving South Africa is beginning to fall.

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