

Sweating your assets

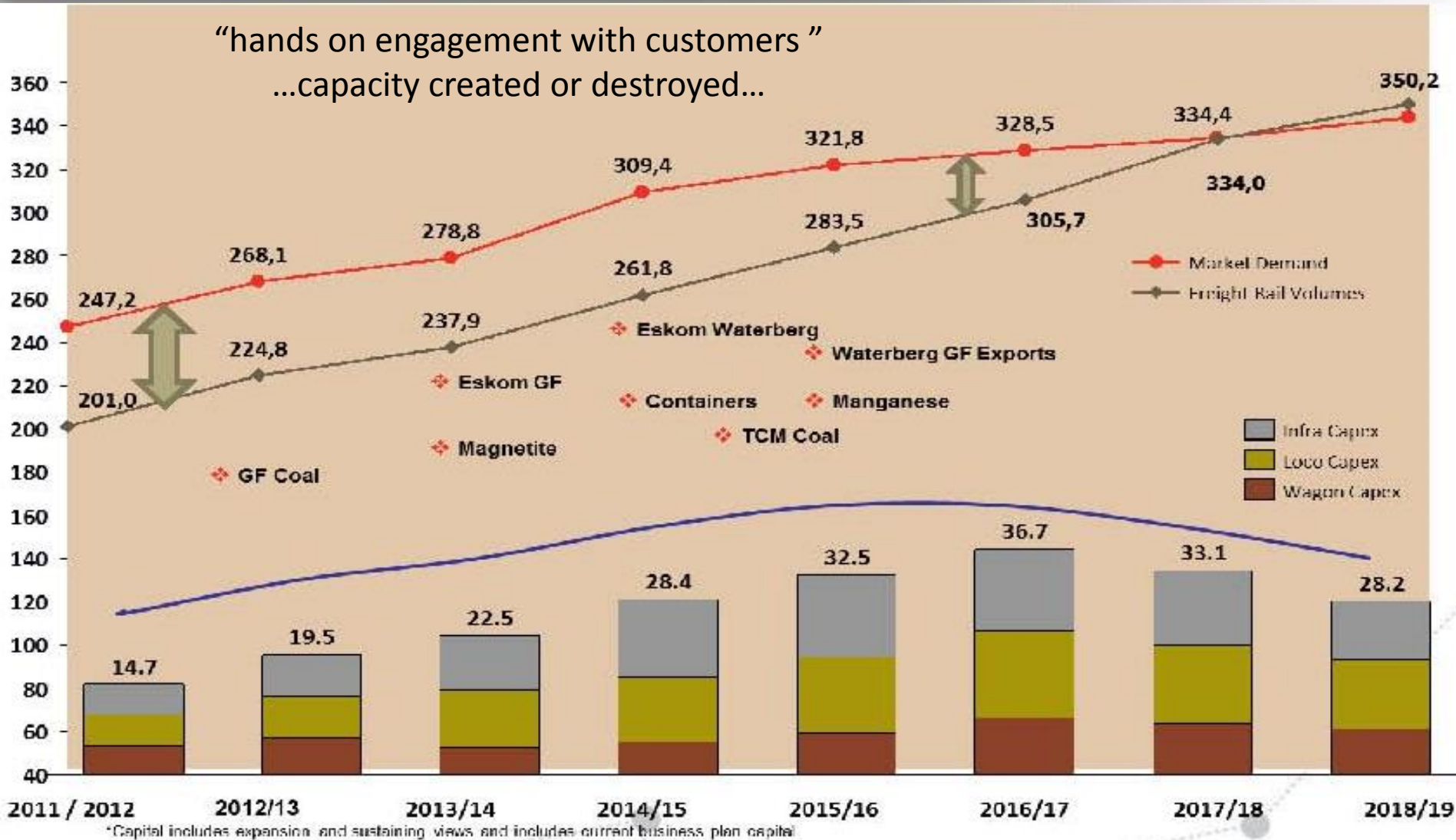
- Road to Rail;
- Repurpose infrastructure assets;

Barberry Group

Rail demand is increasing – Efficiencies is Key

Optimal sidings and active 25/8 supply chain collaboration will ensure rail capacity unlocked through in terms of MDS

“hands on engagement with customers”
...capacity created or destroyed...



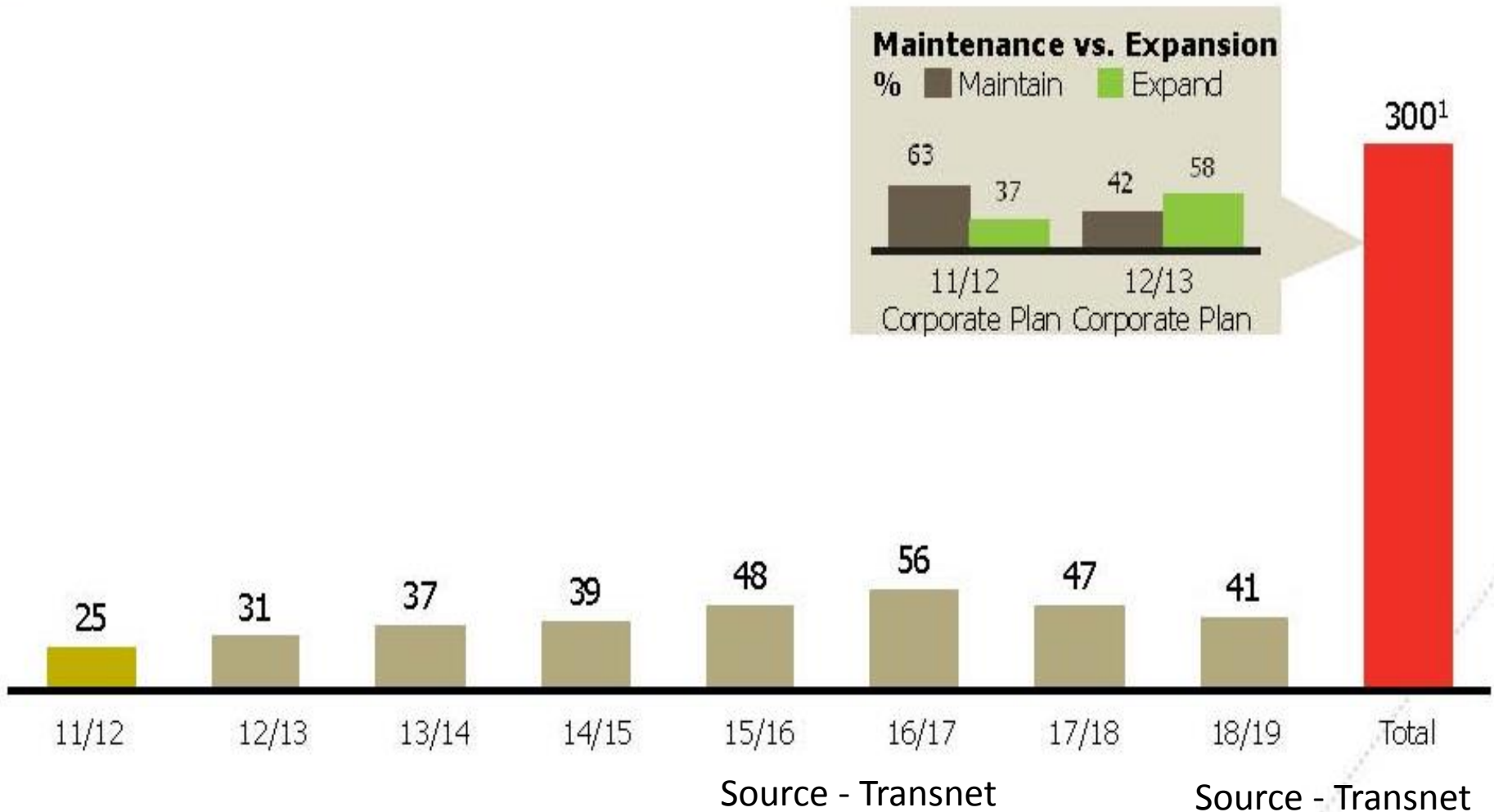
*Capital includes expansion and sustaining views and includes current business plan capital

Source - Transnet

Efficiencies, Capital investments, Market demand, Accountability, People, Safety,

Capital Investment Committed to increase Rail volumes

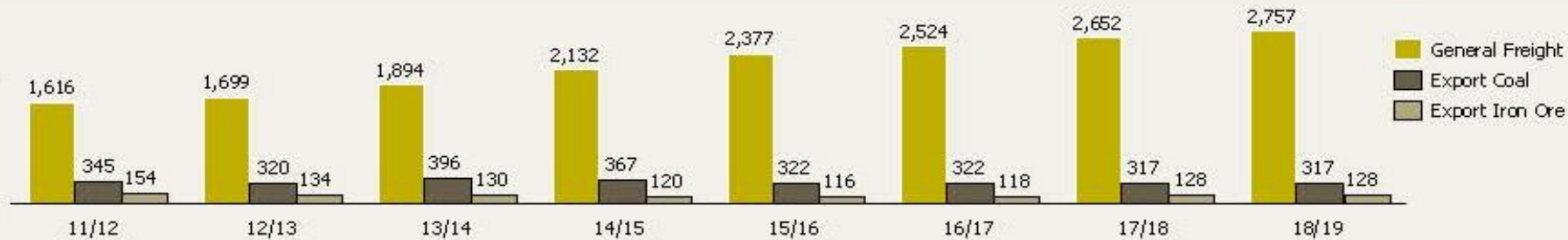
Capital investment
Rbn



Rolling Stock

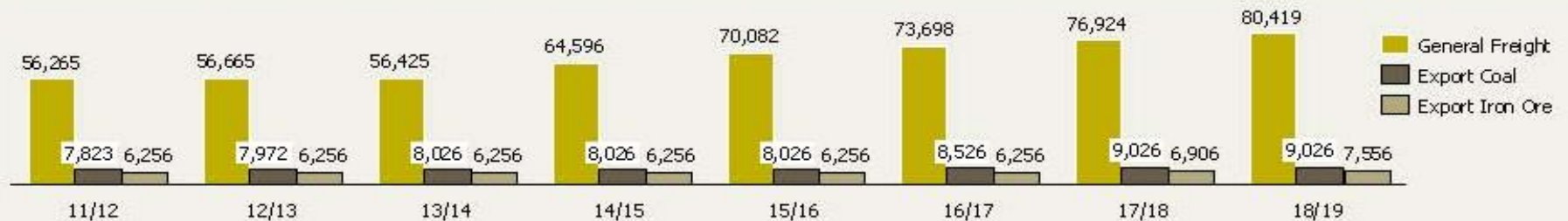
New assets must be optimally deployed to maximise volume moved

Locos



- Fewer but more powerful 19E locomotives will be deployed on the Export Coal line
- Fewer but more powerful 15E locomotives will be deployed on the Export iron Ore line
- For General Freight, the impending run out of various aged loco classes requires replacement.
- Replacement locos are more powerful and fuel efficient
- Replacement electric locos will be dual voltage – 3kV/25kV – mitigating operational constraints in single voltage locomotive deployment
- Locomotives will be standardised for universal deployment to haul available tonnage irrespective of commodity
- Locomotives are tactically deployed to corridors, with dynamic allocation according to market and operational requirements

Wagons



Wagons for Coal Line are being migrated to Jumbo Wagons (84 tons per wagon)
 Wagons for Ore Line are exclusively CR wagons (100 tons per wagon)
 General Freight wagons are commodity specific, for example:

- C type wagons are general purpose for mineral mining commodities
- X Type Tanker Wagons for liquids
- S Type Flat beds for Containers

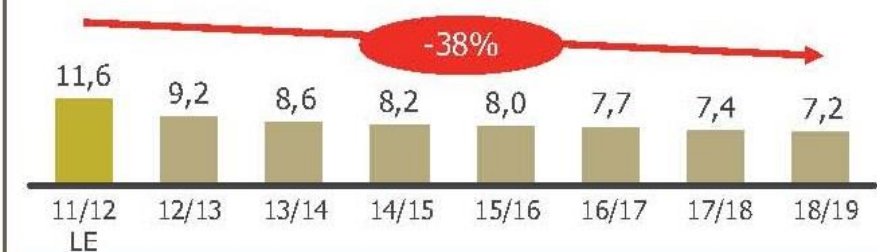
Source - Transnet

Significant improvements required in terms of utilisation of wagons (cycle time reduction) and locomotives to achieve shift from road to rail

General Freight – Loco efficiency ('000 GTK/loco/month)



General Freight – Wagon turnaround time (days)



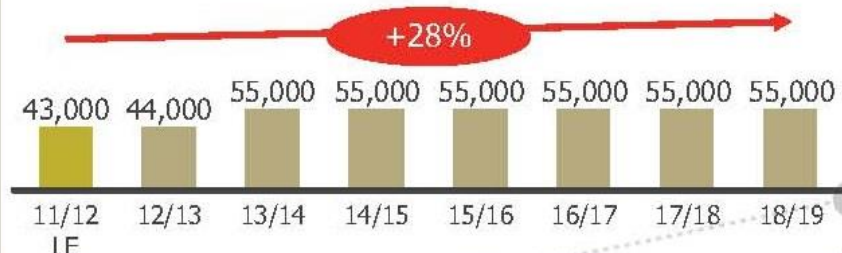
Export coal – Loco efficiency ('000 GTK/loco/month)



Export coal – Wagon cycle time (hours)



Export iron ore – Loco efficiency ('000 GTK/loco/month)

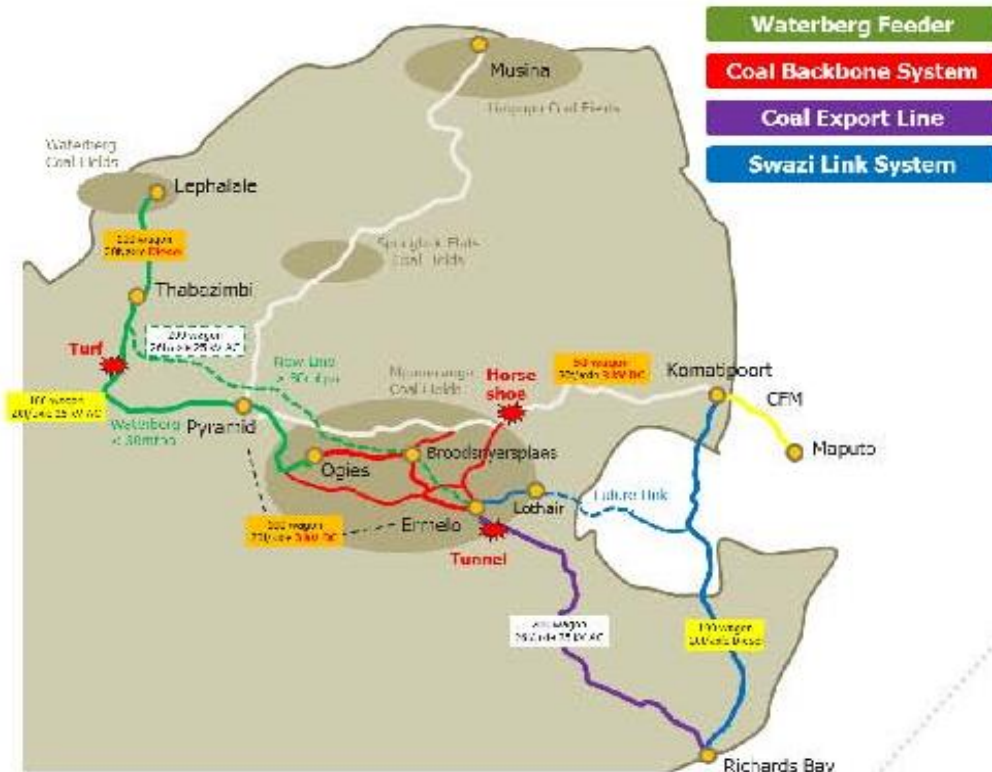


Export iron ore – Wagon cycle time (hours)



TFR network investments to enable longer and heavier Trains

- The SA coal system is considered holistically
- Serves all general freight, minerals, domestic- and export coal on a common infrastructure platform and requires integrated planning
- Rolling stock is largely shared

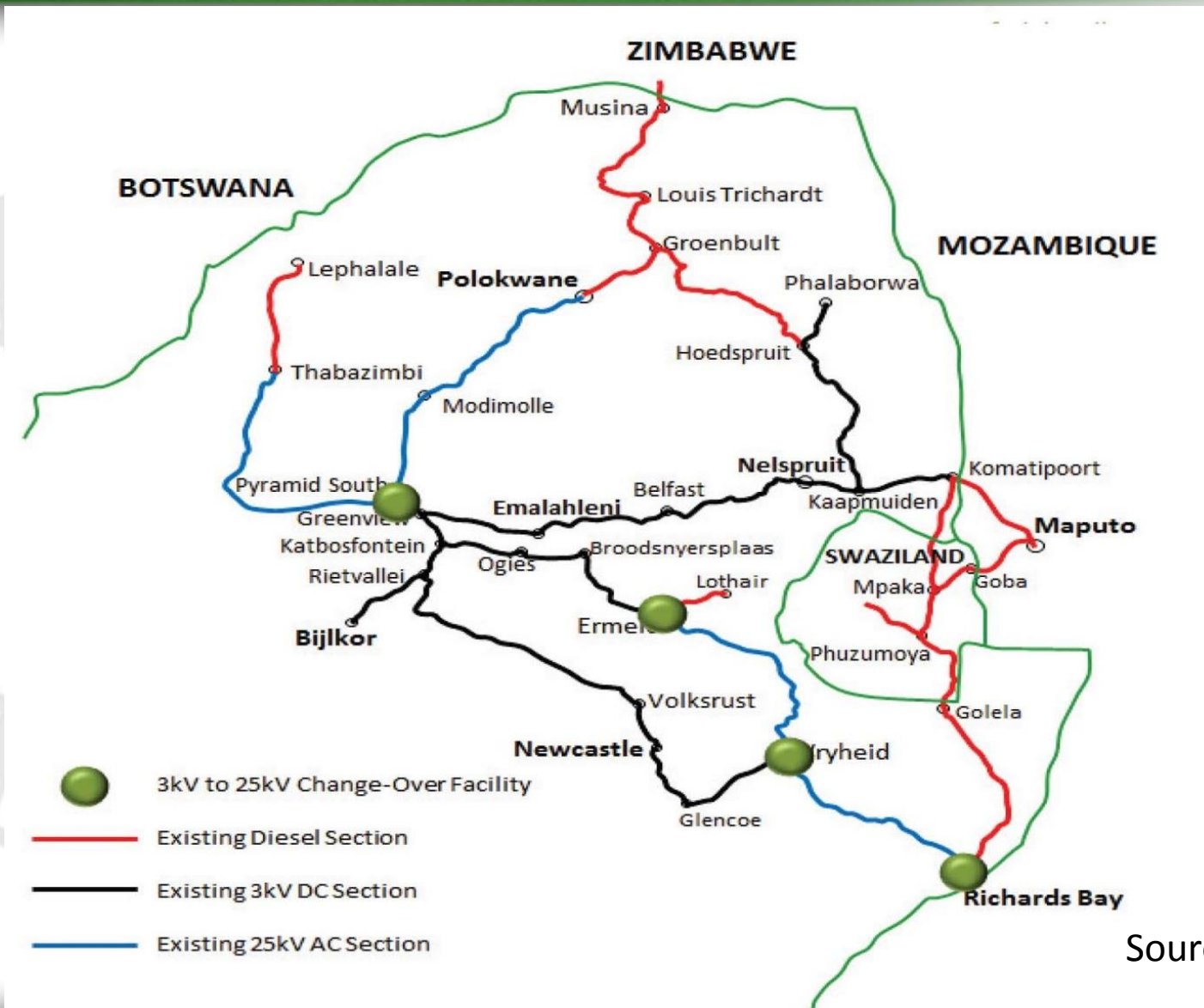


Expected total investment:		>R 90 bn
Committed investment in infra to 2019 (Escalated and Un-escalated)		R 45,5 bn
Projects	Completion	Committed to 2019
Coal 81Mtpa	2018	R 31,6 bn*
Waterberg feeder	2019	R 5,1 bn
Coal backbone	2018	~R5.1 bn
Coal 91Mtpa plus	2018	
Swaziland link (#)	2018	R 5,0 bn
Overvaal tunnel	TBA	~R 2 bn

(*) Infra and Rolling stock – sustaining and expansion, escalated.
 (#) Complimentary investment required by Swaziland Rail

Source - Transnet

Optimal use of TFR network will enable MDS to be achieved by block trains that's Longer and Heavier

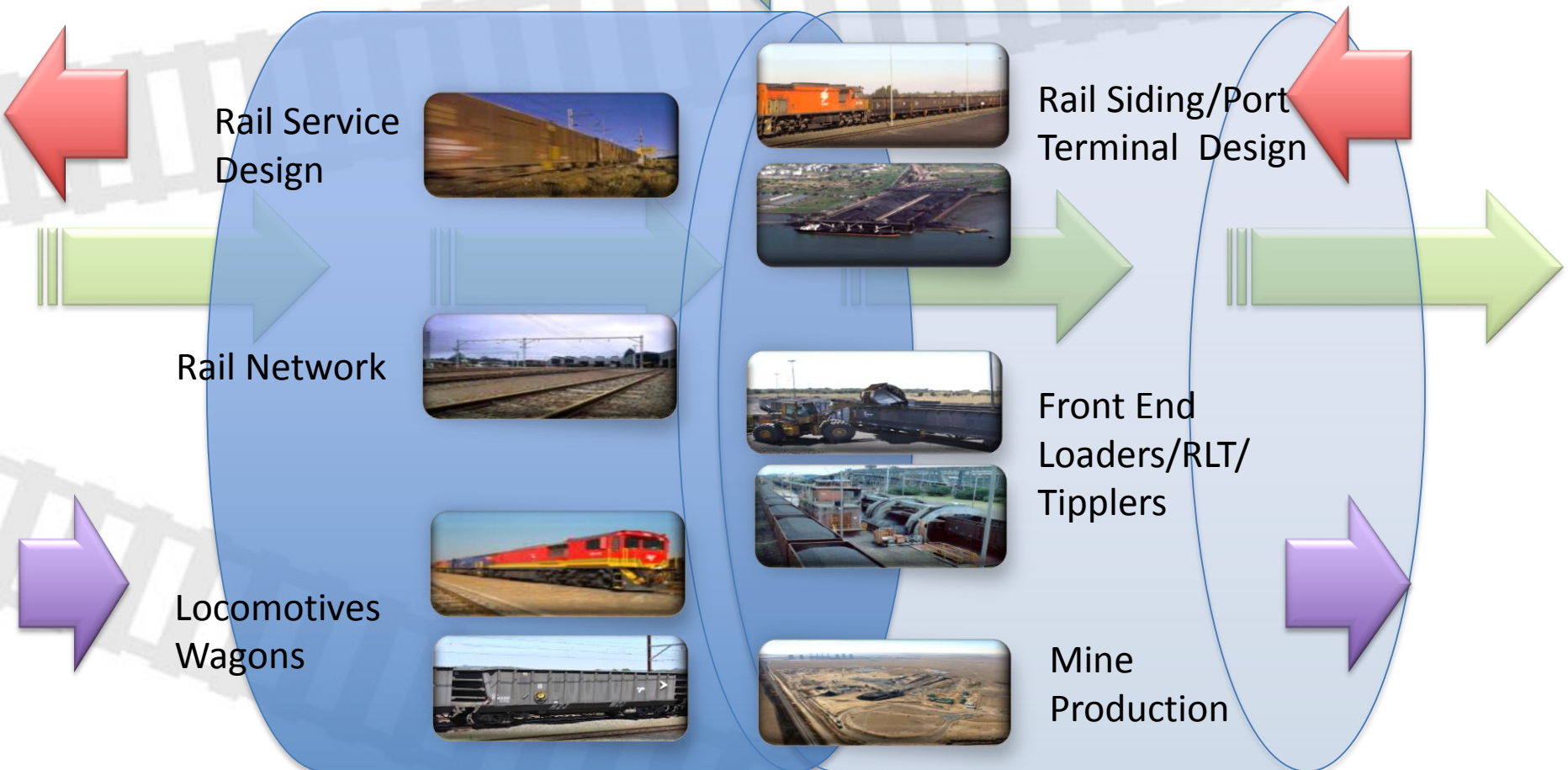


Source - Transnet

Moving product to rail needs significant price savings to enable the double handling and can be achieved through collaboration and optimal siding designs to keep "Rail in Motion"

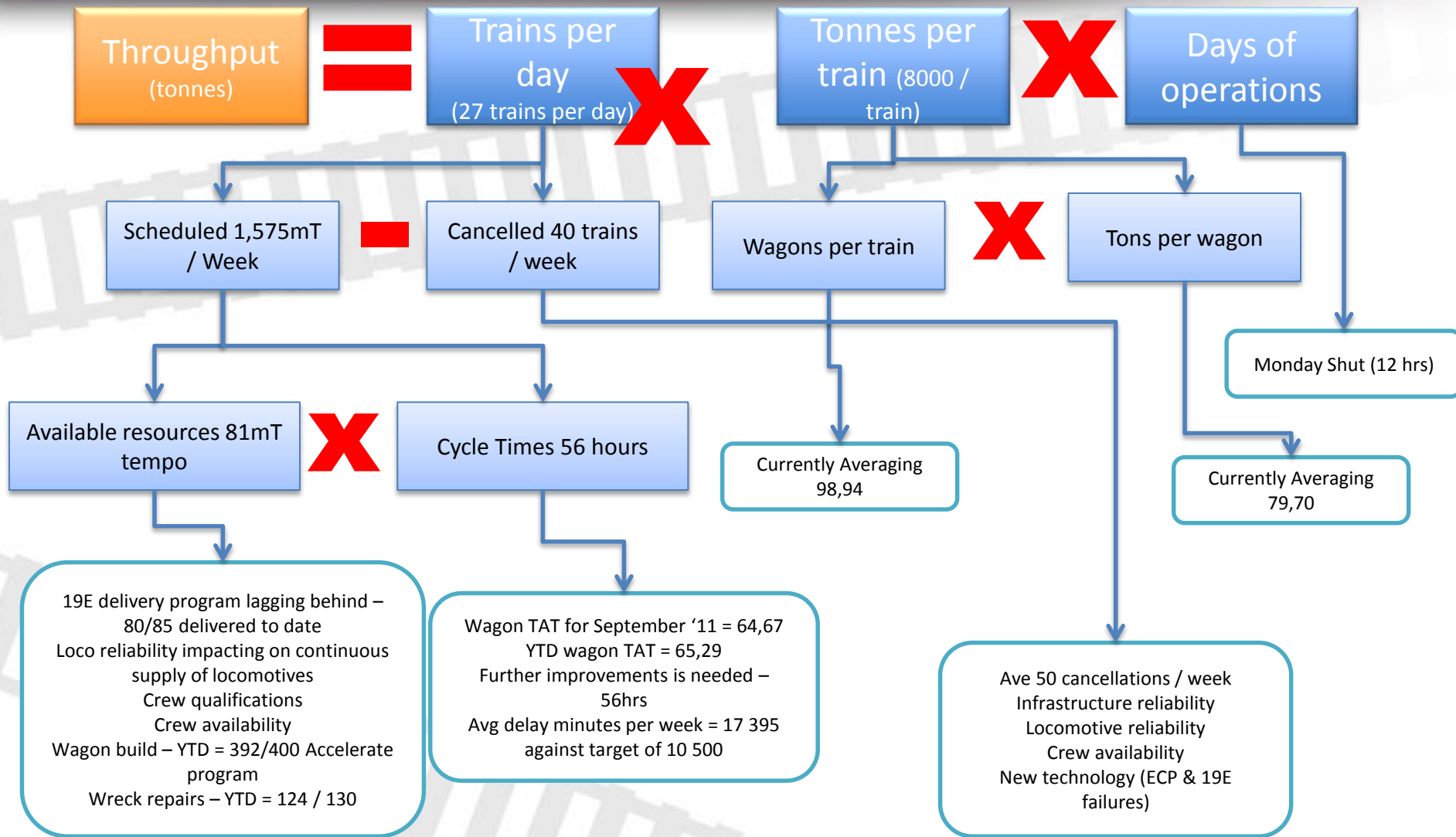
Customer

Rail



Synchronised Supply Chains

Detailed understanding of rail throughput elements is essential to unlock efficiency improvements – elements universal to all corridors – narrow the gap to world class RBCT system



Optimal Siding Designs and capability to load and unload block trains in 4 to 6 hours with mainline locomotives waiting or slip loading will enable a step change in volumes

- Design for 100 CCL or 80 CFR type wagons;
- 24/7 loading;
- Load trains with the locomotives attached;
- Direct access to the main line;
- Load Trains in 4 hrs. (Total Processing Time);
- 24/7 planning and deviation management team;
- Load cells on FEL's;
- Weight certification by in motion rail w/bridge;
- Close to Wash Plant;
- Ability to load for domestic and export markets.
- Adequate stockpile area for blending and multi product management;
- Siding capacity defined by number of trains that can be received in and out in a day – optimal 4 trains a day and capacity of 10 000 to 20 000 tons per day;



Maputo Corridor – Case study on rail elements optimization achieved

Real Life
Success Story

From the desk of the CE



Siyabonga Gama

Dear colleagues

SHAPESHIFTING!


The Maputo Corridor coal team has made us proud again. This is a Shapeshifting achievement!

For the week ending 21 August 2011 they delivered 37 out of the planned 35 trains. This translates to 96.3 thousand tons railed in the week as opposed to the planned 77 thousand tons.

This remarkable performance gives us an indication that the 4.5 million tons tempo of 42 trains per week on the corridor is within reach. It therefore calls upon all of us to refocus on the basics of doing our business so as to ensure consistency. Teamwork, focus on moving tonnages safely and the reduction of wagon's cycle times, have played a major role in yielding this performance. Let us build on this achievement going forward as we move to 219mt **SAFELY**.

Safety is the cornerstone of our success. It creates the capacity to grow volumes. Let's observe safe working practises always.

Well done colleagues and let us keep up Shapeshifting!



Siyabonga Gama
Chief Executive

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delivering on our commitment to you 

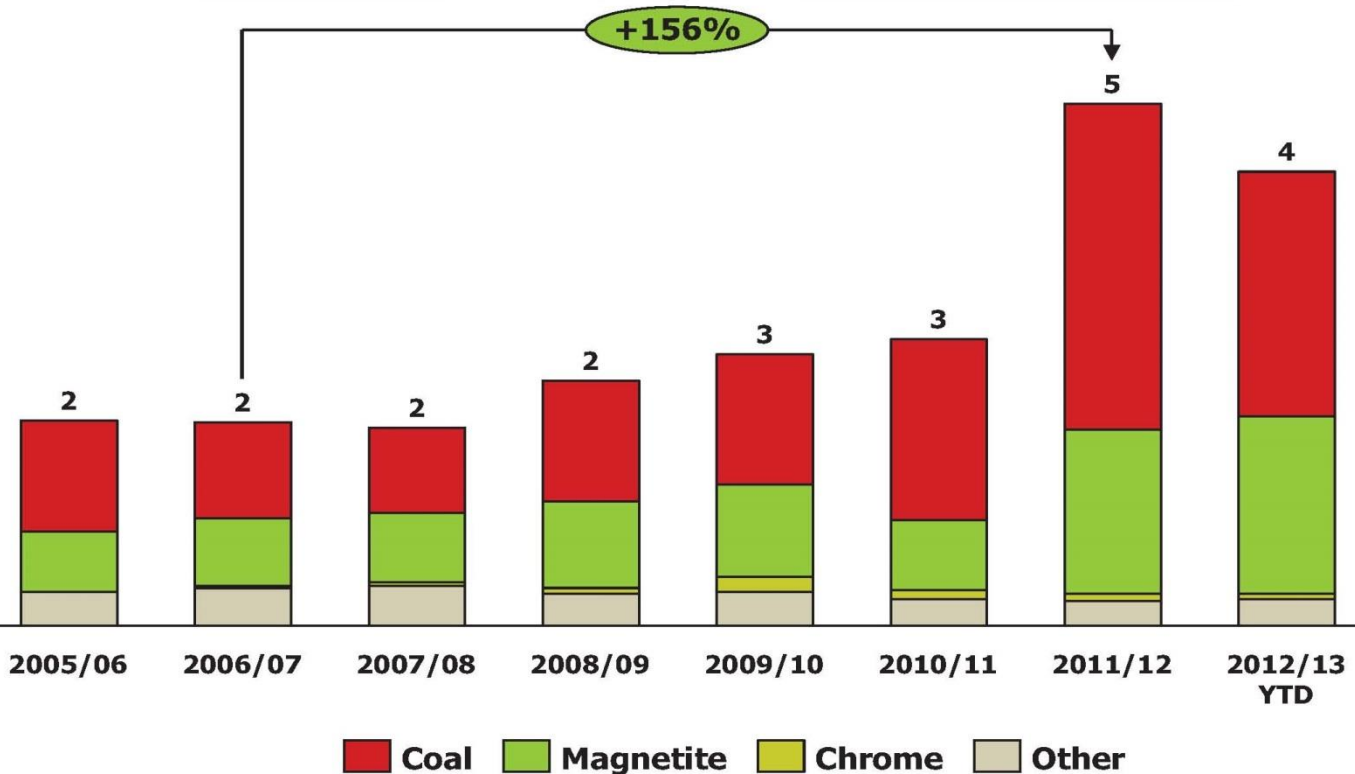
Maputo Corridor Case Study – Significant growth but logistics cost to high for US\$60 coal market

Significant growth and revival of the corridor was achieved through Collaboration

freight rail

Stabilise

Increase Capacity



Harnessing the potential for growth of Coal & Mineral Mining commodities

Transnet to migrate rail to fixed-schedule service by mid-2012

By: Terence Creamer
Published: 15 Nov 11



Transnet Freight Rail (TFR) has started migrating its general freight business (GFB) to a scheduled service having hitherto operated a tonnage-based dispatching model, whereby trains waited for loads to accumulate before departing.

CEO **Siyabonga Gama** said fixed schedules were already in place for four key general freight lines and the remainder of the network would be placed on fixed schedules, in phases, by mid-2012.

The key KwaZulu-Natal corridor, or Natcor, would be part of the "next batch" of conversions and there was also a plan to increase the number of daily trains running each way on the corridor from 35 currently to around 60 within the coming three years.

Gama said the upscaling of the model had the potential to raise the efficiency of its rolling-stock fleet, which currently comprised 56 000 wagons and 1 400 locomotives. However, TFR was also recapitalising its aged fleet, which should bolster its capacity to recapture rail-friendly market share from road.

The corridors already operating on the fixed-schedule model included the one carrying magnetite between Phalaborwa and Richards Bay; the corridor transporting coal to the Majuba power station, in KwaZulu-Natal; the Ultkyk-Komatlepoort channel for exporting coal through the Matola terminal, in Maputo; and the channel carrying phosphate rock from Phalaborwa to Richards Bay.

Those commodities already converted represented so-called anchor flows in the north-eastern and eastern corridors, and involved 19-million tons, or 21% of the GFB's yearly flows. Overall, TFR runs between 750 and 1 025 trains daily, and the GFB moves some 80-million tons yearly.

Gama said the new model required a new culture at TFR, but also depended materially on improved planning in collaboration with customers, as well as on stronger teamwork between the planning teams at the National Command Centre in Johannesburg and teams executing the plans.

Should it prove successful, however, it could lead to a dramatic drop in cycle times from 12.5 days currently to a targeted level of eight days, or better.

"More tons on time, we believe, will translate into more tons," Gama added, noting that some 25-million tons of rail-friendly cargo was currently being transported by road, owing to TFR's record of being unreliable.

The GFB locomotives were currently achieving 22 000 ton-kilometres monthly, as opposed to the global best practice of above 30 000 ton-kilometres. The immediate objective was to lift the monthly average to 25 000 ton-kilometres.

"The introduction of full scheduled rail service could even help us in doubling some of the current flows."

Transnet to Migrate rail to
Fixed-Schedule Service by
Mid 2012

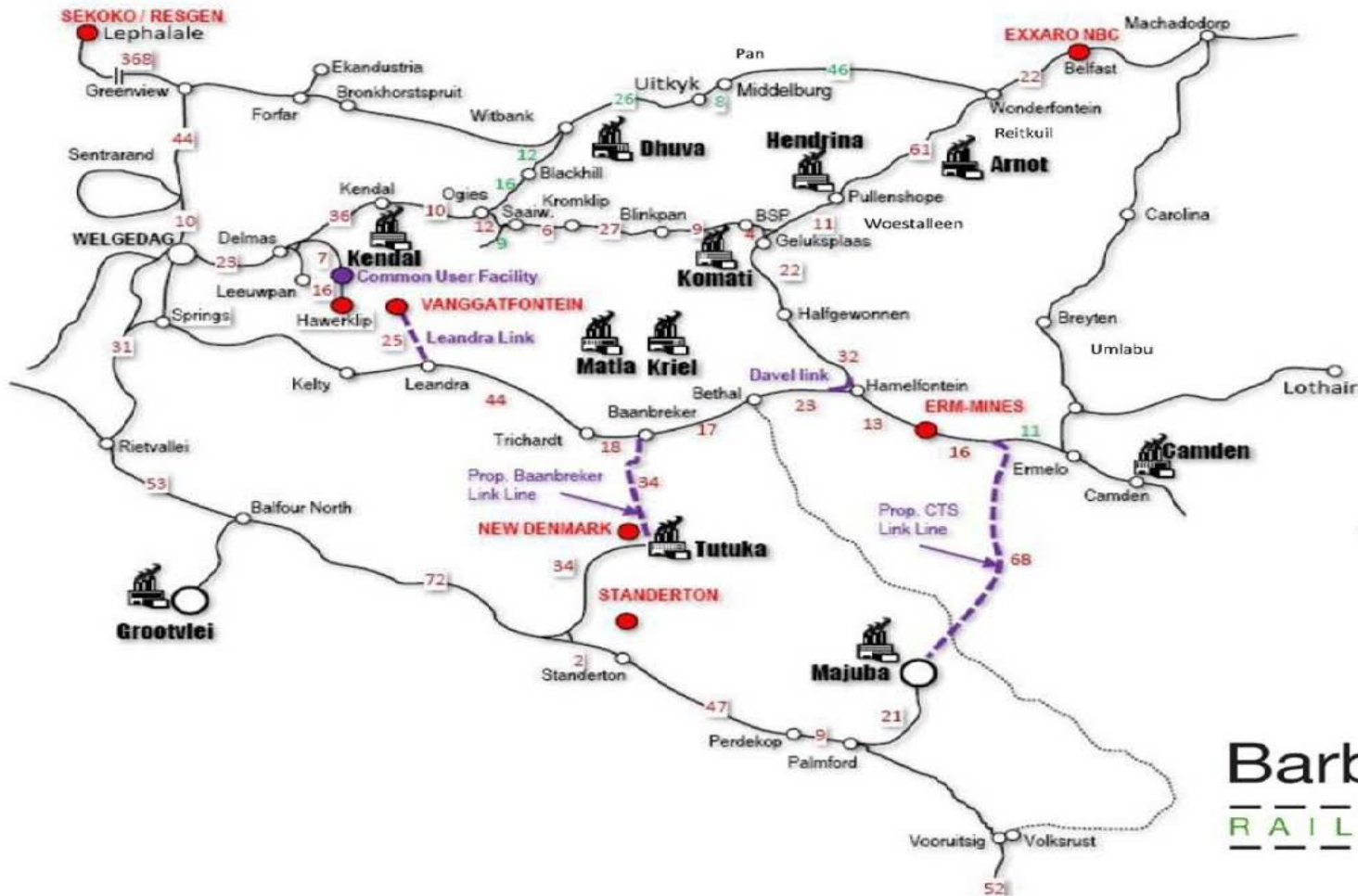
“...depended
materially on
improved
planning in
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customers...”

Case Study - Eskom

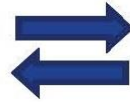
- Eskom Road to Rail Strategy – need to have upto 20mtpa in the short term on rail.
- Trains are shuttled to and from Eskom power stations like Majuba, Camden, Tutuka and Grootvlei
- Critical is the cycle time of wagon sets.
- Ability to slot export trains in-between domestic trains



Case Study – Eskom loading and receiving sites



Case Study – Eskom - Multimodal terminals



Open top containers arrives at CCT

Container transferred by reach Stacker to Rear Tipping vehicle or Rail Wagon



Container is tipped and returns to CCT

Container is transferred to CSY

Managed Services



Efficiency Improvements

Hot seat loading of Trains in 4 to 6 hours



Collaborative Rail Management

25/8 Real Time deviation management



Service Design & Contract Management

Cycle time reduction to < 4 days

Visibility of corridor performance

Full Efficiency designs and pricing

- Assets are strategically located to rail with existing connections to the network;
- Large property and infrastructure for multi modal logistics;
- Repurposing investigated
 - Coal storage;
 - Fuel/bulk liquids storage;
- Bi-directional flows;

Barberry Groups' strategic intent is :

1. To be the value added rail logistics specialist on an open and transparent basis with **rates as negotiated with TFR**;
2. With an agreed upon **Flow Management Fee** and
3. **Cost Saving** sharing incentive basis of savings motivated by ourselves off a base TFR rate.
4. The offer to use the BG **rail account** at a negotiated cost, subject to adherence to TFR's credit terms.

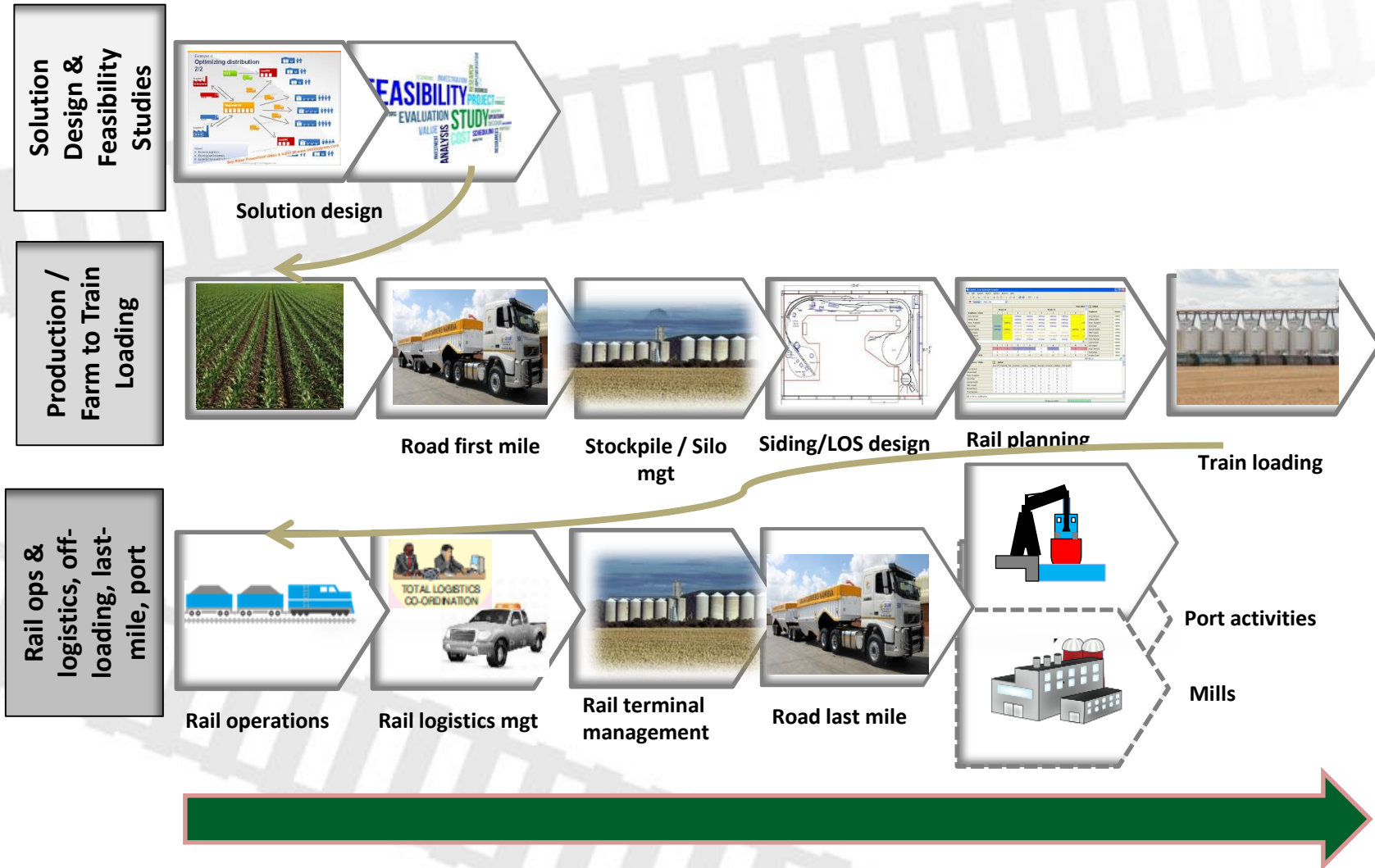
Our business objective is to **establish trust through transparency** and underpinned by our specialist capabilities on all elements of your supply chain.

Engagements with TFR have focused on active 24/7 train monitoring of cycle times and redesign of service codes so as to sustain these initiatives and ensure “win-win-win” solutions for all parties.



1. TFR's **Agriculture and Bulk Liquids (ABL)** Business Unit is under significant pressure from road transportation
2. A strategic approach, consolidating flows from **producer to consumer** needs to be considered, designed and implemented
3. Engaging with TFR around **cycle time and bi-directional optimisation** - improving income/wagon/month for TFR and lower net tariffs per flow to our customers.
4. TFR have already commenced some initiatives in this area and have confirmed **improved rates on some routes** and we propose through our engagement to increase solutions in this area and other flows.
5. This logic has also been successful in other bulk sectors we operate in.

Barberry Group & SMART Partners active in the entire rail value chain



Partnering with TFR to migrate volumes from road to rail



Value propositions and expertise

- Efficient
- Long haul rail transportation
- Asset base for multimodal solutions
- Position rail as integral to supply chain
- Road freight logistics and distribution
- End to end value chain management
- Supply chain visibility
- Deliver optimisation through multimodal mix of transport modes, including rail



Collaboratively develop multimodal solutions

- Provide lease property
- Provide and deliver wagon capacity
- Provide and deliver full rail slots
- Provide and deliver rail services
- Develop, operate, manage terminals
- Invest in wagons (& other assets)
- Marketing/selling of rail solutions
- Contract TFR - required rail services



Benefits to the SA economy and cargo owners

- Reduction in road damage and accidents
- Reduces road congestion
- Reduction in greenhouse gases
- Supports NDP
- Innovative solutions meet requirements
- Rail and road balance achieved in the supply chain
- Achieve optimisation benefits
- Reduce cost of logistics

Let's Collaborate



We are a level 1 BBBEE contributor offering you the expertise of rail specialists with an entrepreneurial spirit that is focused on siding infrastructure and rolling stock investments to minimise the total costs of our customers supply chains.

We are passionate and strive for speedy and safe management of our customer's cargo by offering hands-on involvement focused on 24/7 dynamic real time decisions to optimise the turnaround of wagons to ensure rail is kept in motion.

Key focus service provider area's :

- Train Loading / Unloading and Container Packing
- Flow Management through collaboration
- Rail Siding Management
- Cross-border Rail Management
- Road Truck Co-ordination
- Above ground Mine Plant and Equipment Hire
- Discard Dump Management
- Optimised Mine and Siding Logistics Designs
- Logistics Pre-feasibility Studies
- Logistics Bankable Feasibility Studies
- Project Management

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