



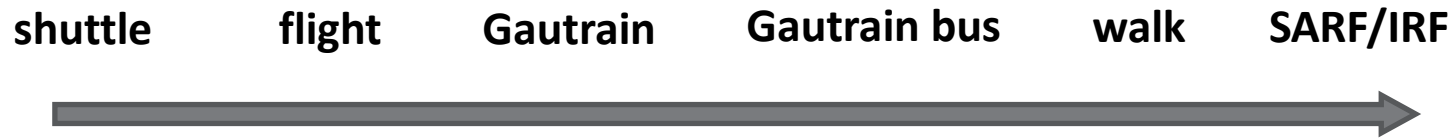
The potential impact of South Africa's current intermodal strategies on national transport costs

SARF 2014, CSIR Convention Centre, Pretoria

4 September 2014

Nadia Viljoen

Growth and Intelligence Network cc





(The many faces of intermodalism)

SARF 2014, CSIR Convention Centre, Pretoria

4 September 2014

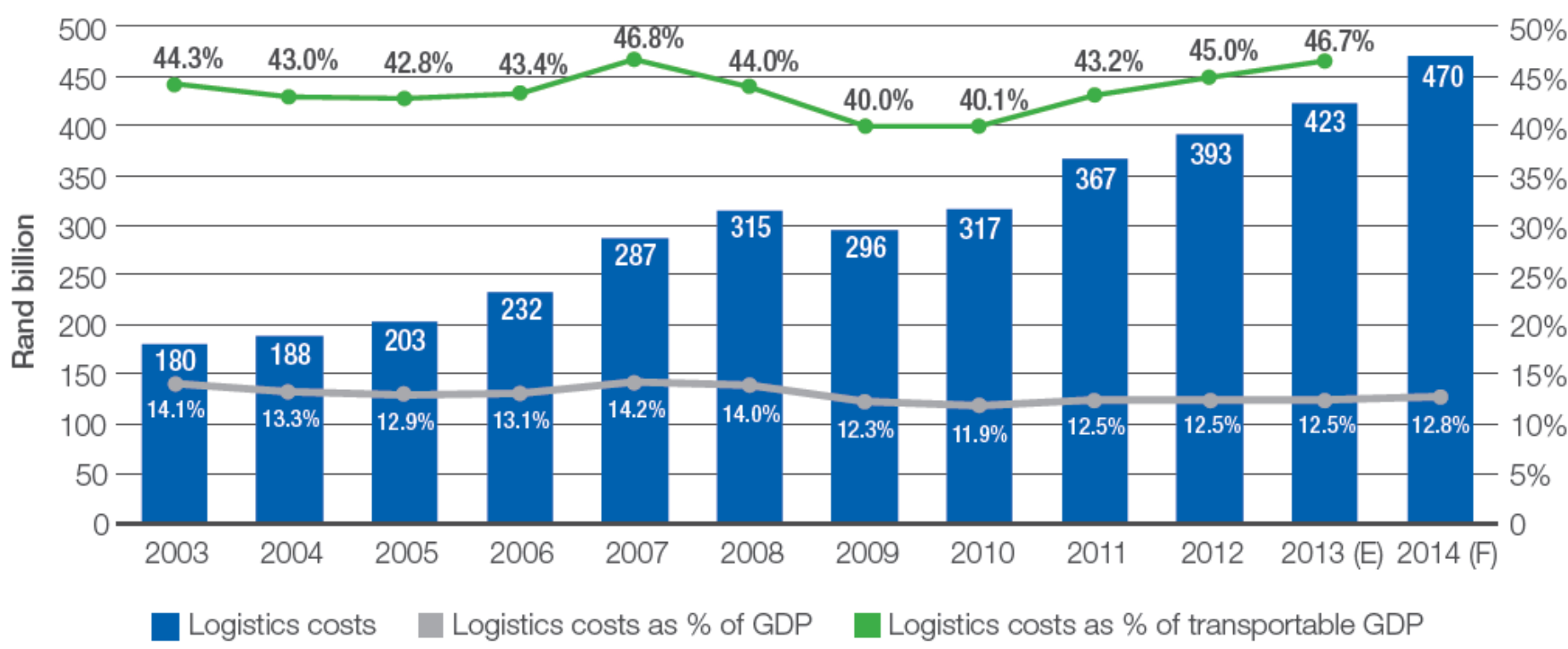
Nadia Viljoen

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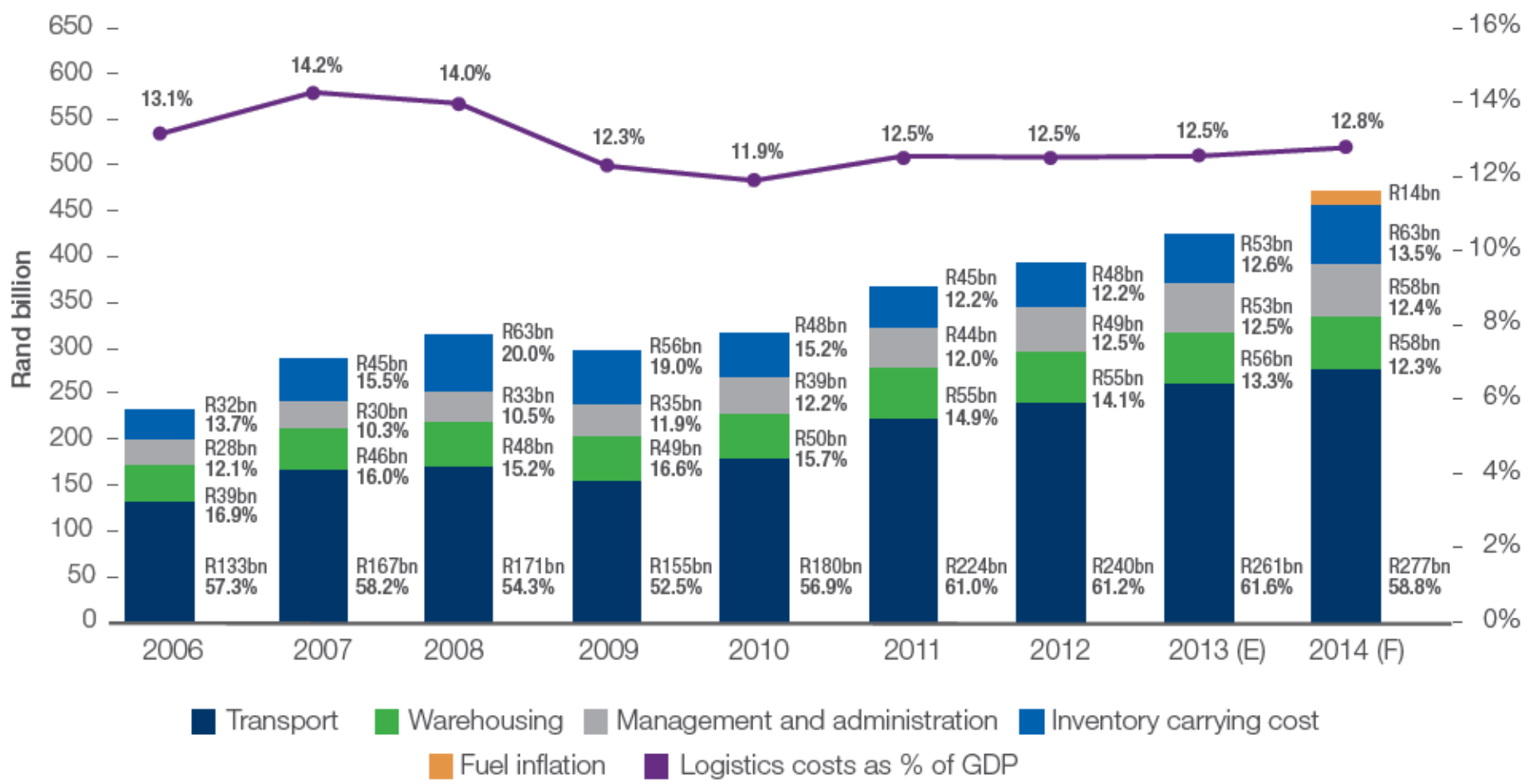
Total logistics costs as a % of total and transportable GDP.



Havenga, J.H., and Simpson, Z. 2014. 10th State of Logistics™ survey for South Africa. CSIR. Available: www.csir.co.za/sol

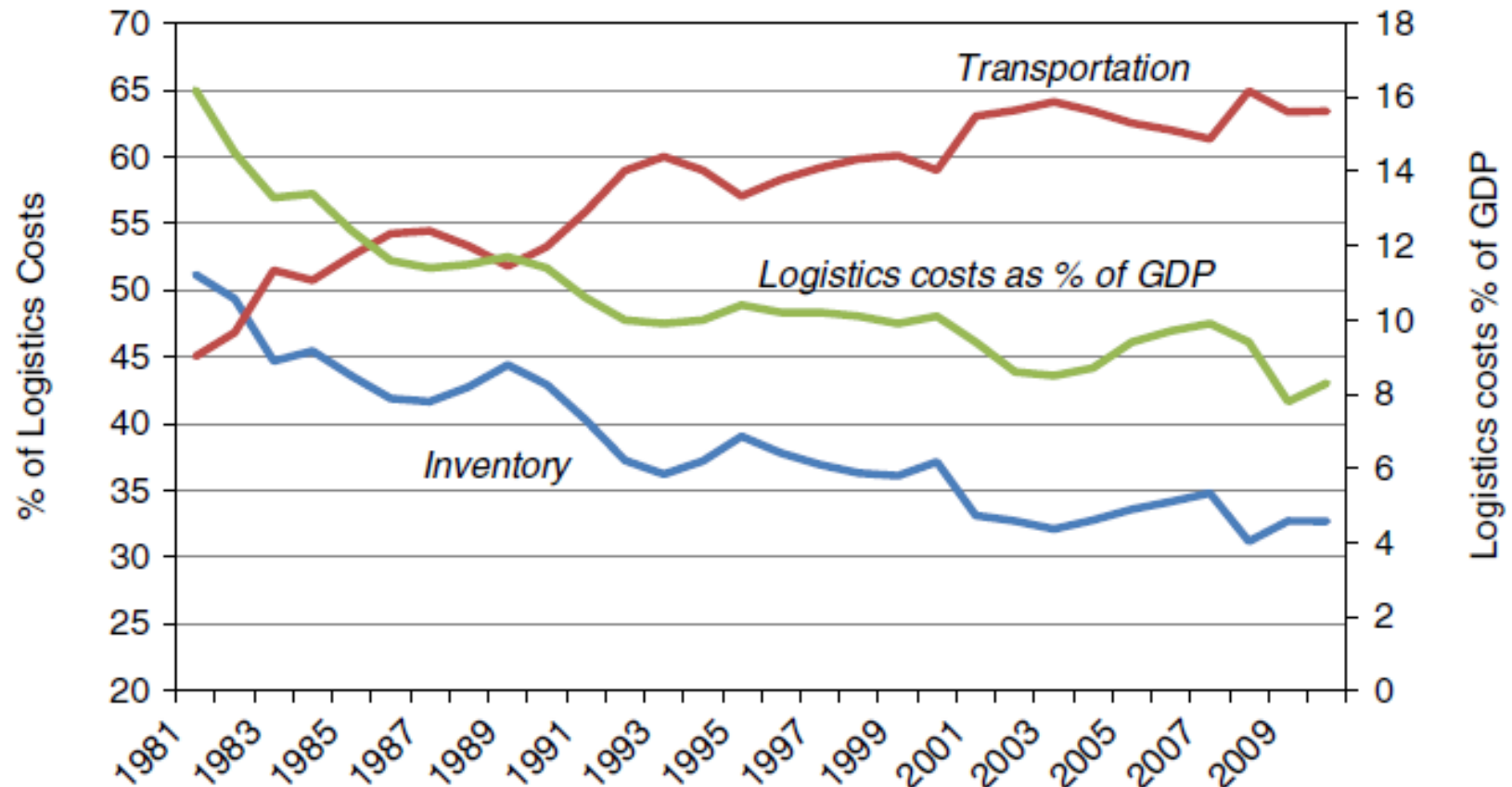


The components of logistics costs





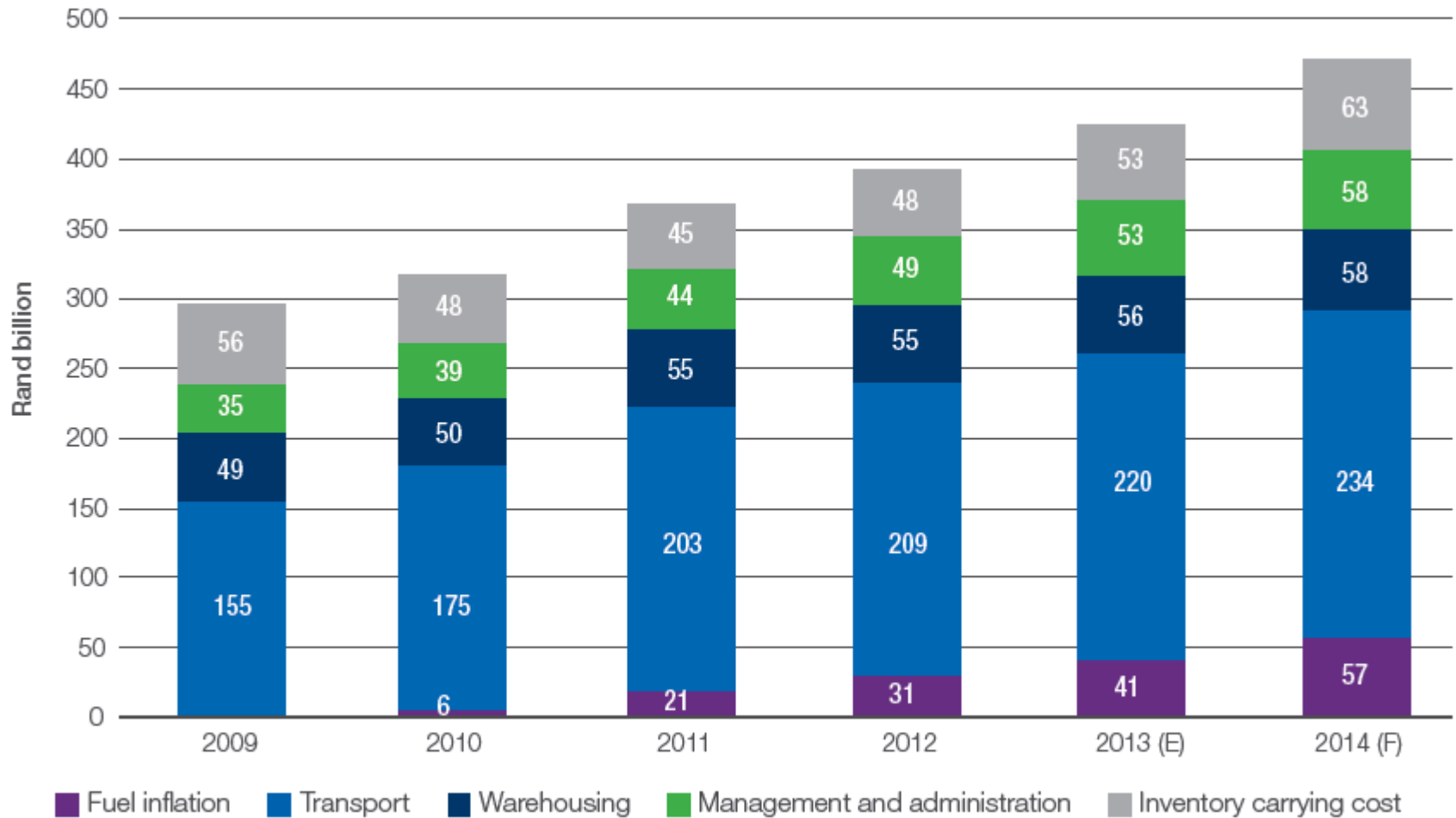
Inventory – transportation trade off in the USA



Wilson, R., (2011), 21st Annual State of Logistics Report: The Great Freight Recession, Council of Supply Chain Management Professionals, Washington.

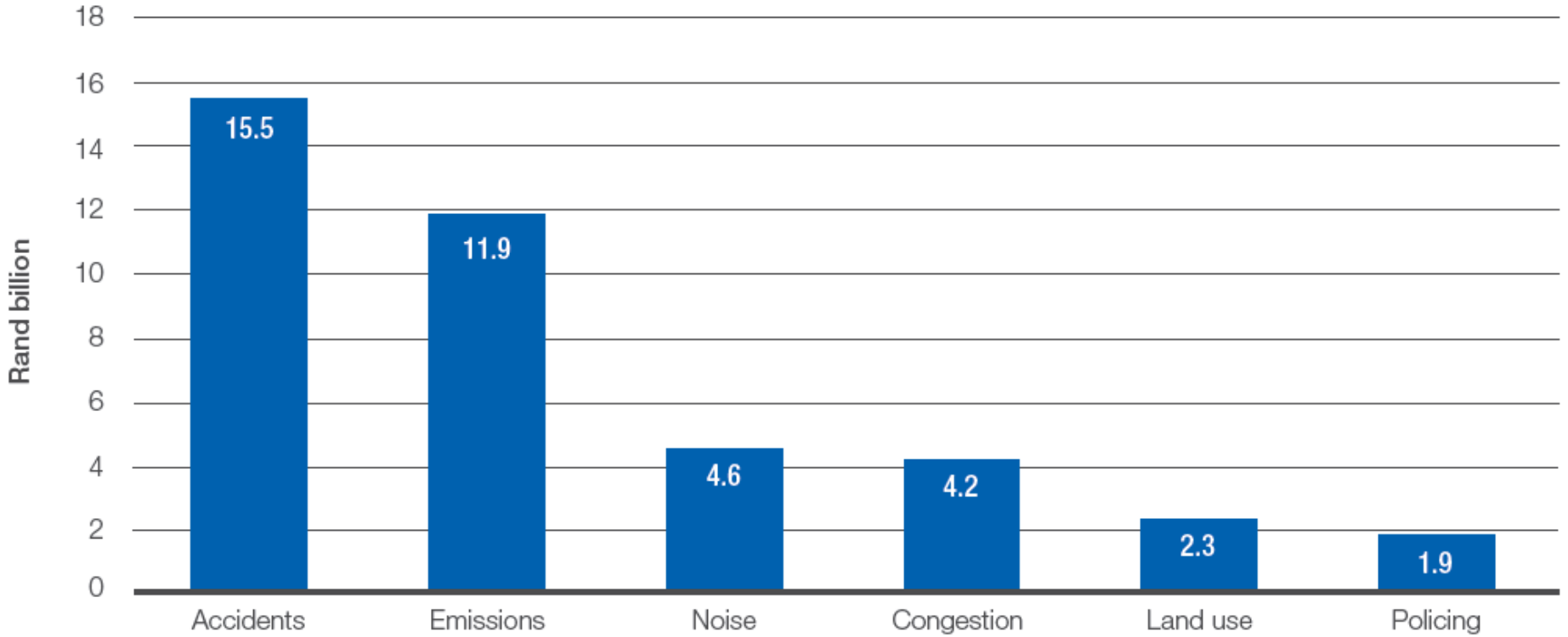


The impact of fuel inflation on logistics costs





Externality costs





The motivation...

- Reduced fuel usage, leading to:
 - Reduced overall logistics costs
 - Reduced emissions
- Reduced congestion on corridors

The business criteria...

- Price
- Time
- Reliability



The current picture...

- Insufficient terminal and rail capacity to offer reliable service
- Transport costs do not yet offset additional administrative and inventory costs (*industry perception!*)
- Negative perception

The (hopeful) future...

- Ambitious intermodal terminal development
- Ambitious rail intermodal strategy
- Organisational change within Transnet



What is the alternative?

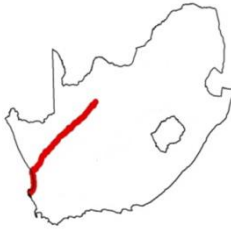


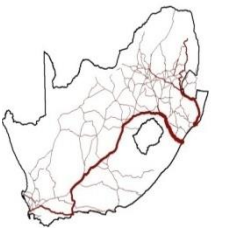
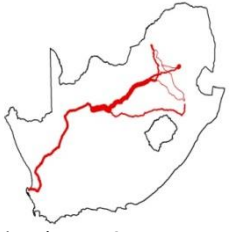


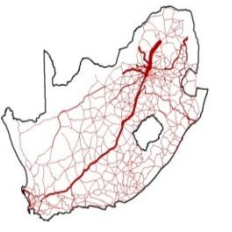
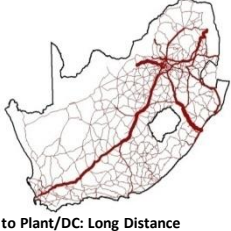
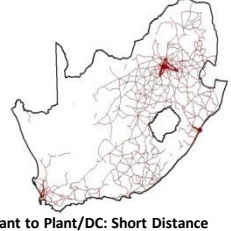
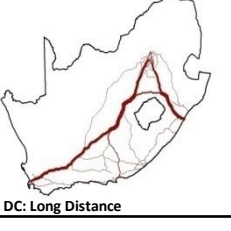

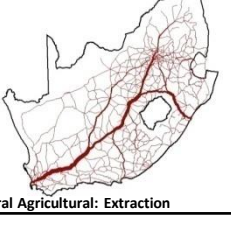
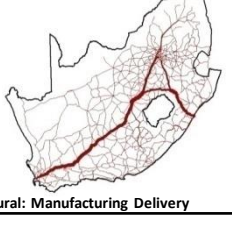
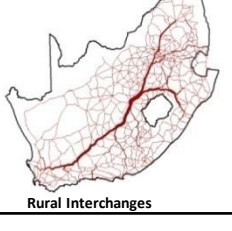
- “Let everyone stick to their knitting”
- Build another N3
- Bigger payloads
- Aggressive push towards greener truck transport (hybrid vehicles etc)
- Reduce demand for transport – move industries to the coast



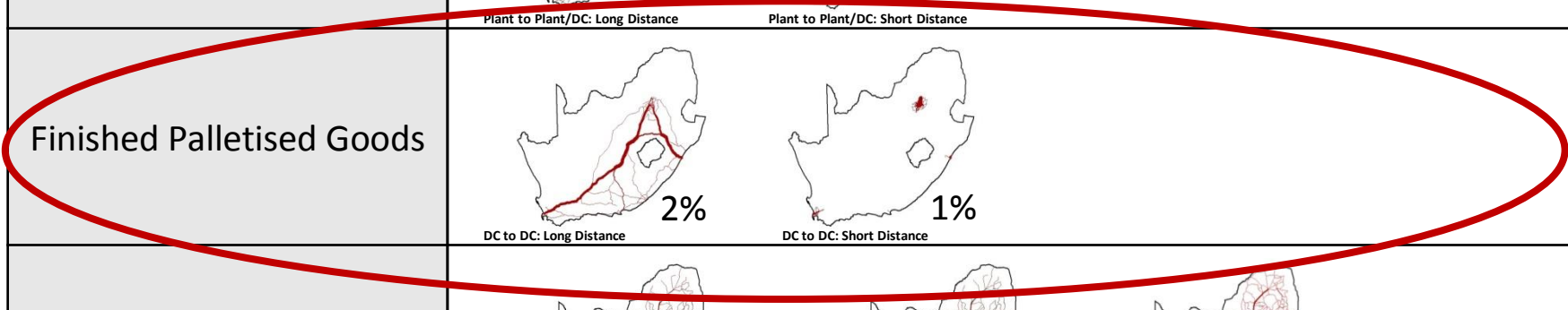
Building the business case

Which freight is appropriate?

- Long-distance
- High density corridors
- High containerisation propensity

<p>Export Mining Flows</p>				
<p>Domestic Mining</p>				
<p>Intermediate Manufacturing</p>				
<p>Finished Palletised Goods</p>				
<p>Rural Extraction and Delivery</p>				

<p>Export Mining Flows</p>	<p>100%</p> <p>Pit to Port: Iron Ore</p>	<p>99%</p> <p>Pit to Port: Coal</p>	<p>92%</p> <p>Pit to Port: Manganese</p>	<p>62%</p> <p>Pit to Port: Other Mining Exports</p>
<p>Domestic Mining</p>	<p>92%</p> <p>Pit to Plant: Iron Ore</p>	<p>63%</p> <p>Pit to Plant: Coal</p>	<p>96%</p> <p>Pit to Plant: Manganese</p>	<p>10%</p> <p>Pit to Plant: Domestic Mining</p>
<p>Intermediate Manufacturing</p>	<p>19%</p> <p>Plant to Plant/DC: Long Distance</p>	<p>4%</p> <p>Plant to Plant/DC: Short Distance</p>		
<p>Finished Palletised Goods</p>	<p>2%</p> <p>DC to DC: Long Distance</p>	<p>1%</p> <p>DC to DC: Short Distance</p>		
<p>Rural Extraction and Delivery</p>	<p>18%</p> <p>Rural Agricultural: Extraction</p>	<p>1%</p> <p>Rural Agricultural: Manufacturing Delivery</p>	<p>4%</p> <p>Rural Interchanges</p>	





Building the business case

	2013	2019	2024
Total tonnes	959 500	1 650 300	3 291 800
Total TEUs	89 600	153 200	309 700



Building the business case

How do you quantify costs?

- Transport costs – obtainable on a national level
- Inventory implications – obtainable on a company level, confidentiality issues
- Cost of administration – vague
- No benchmarks available, thus forecasting and what-if analysis difficult