



**IRF WORLD ROAD
MEETING 2017**

/ 14-17 NOVEMBER / DELHI / INDIA /

**The Road Transport Management
System: A Self Regulatory Approach
for Improving Heavy Vehicle Safety**

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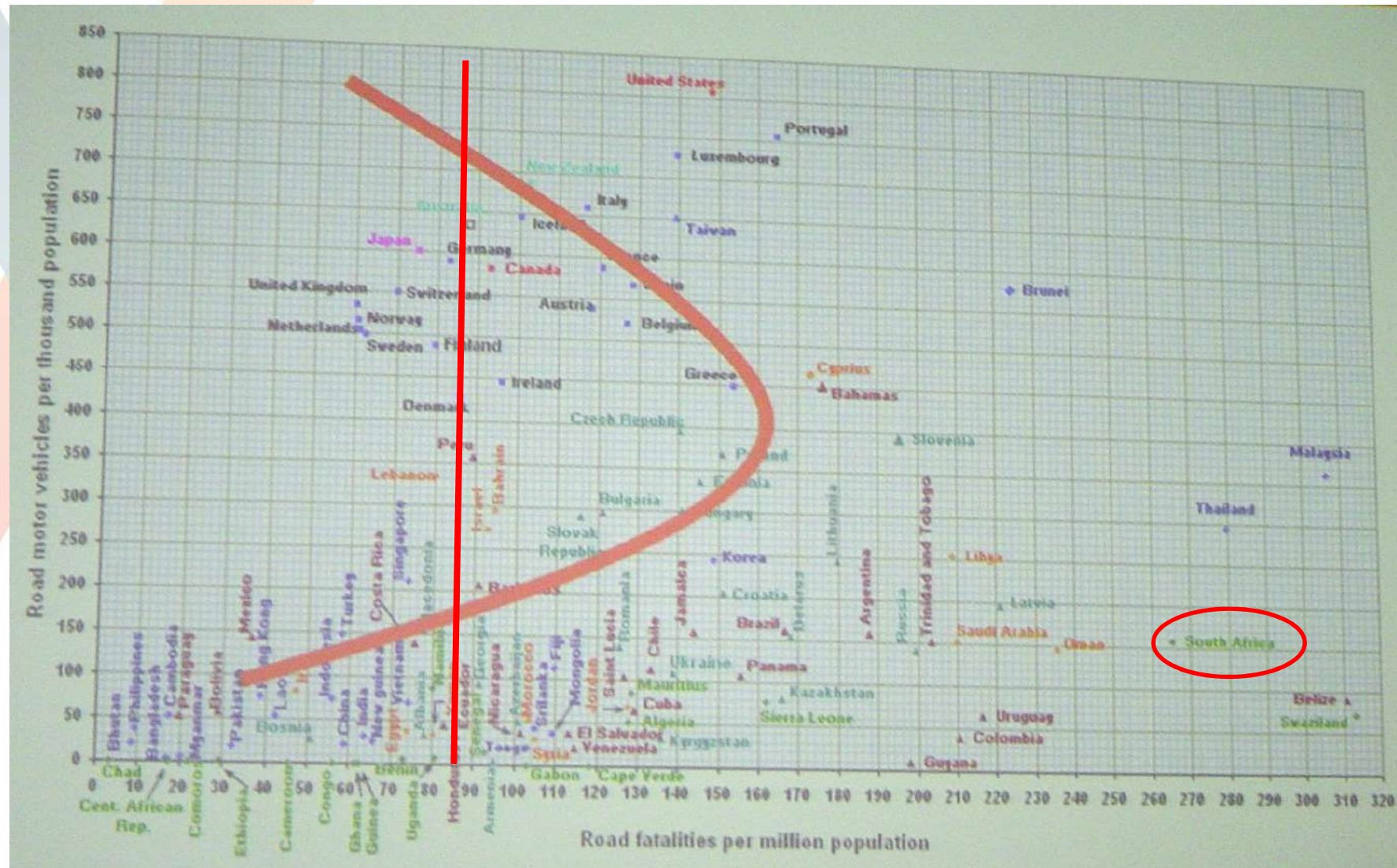
Contents

- Background and problem statement
- The concept of self-regulation
- The Road Transport Management System
- Some observed successes

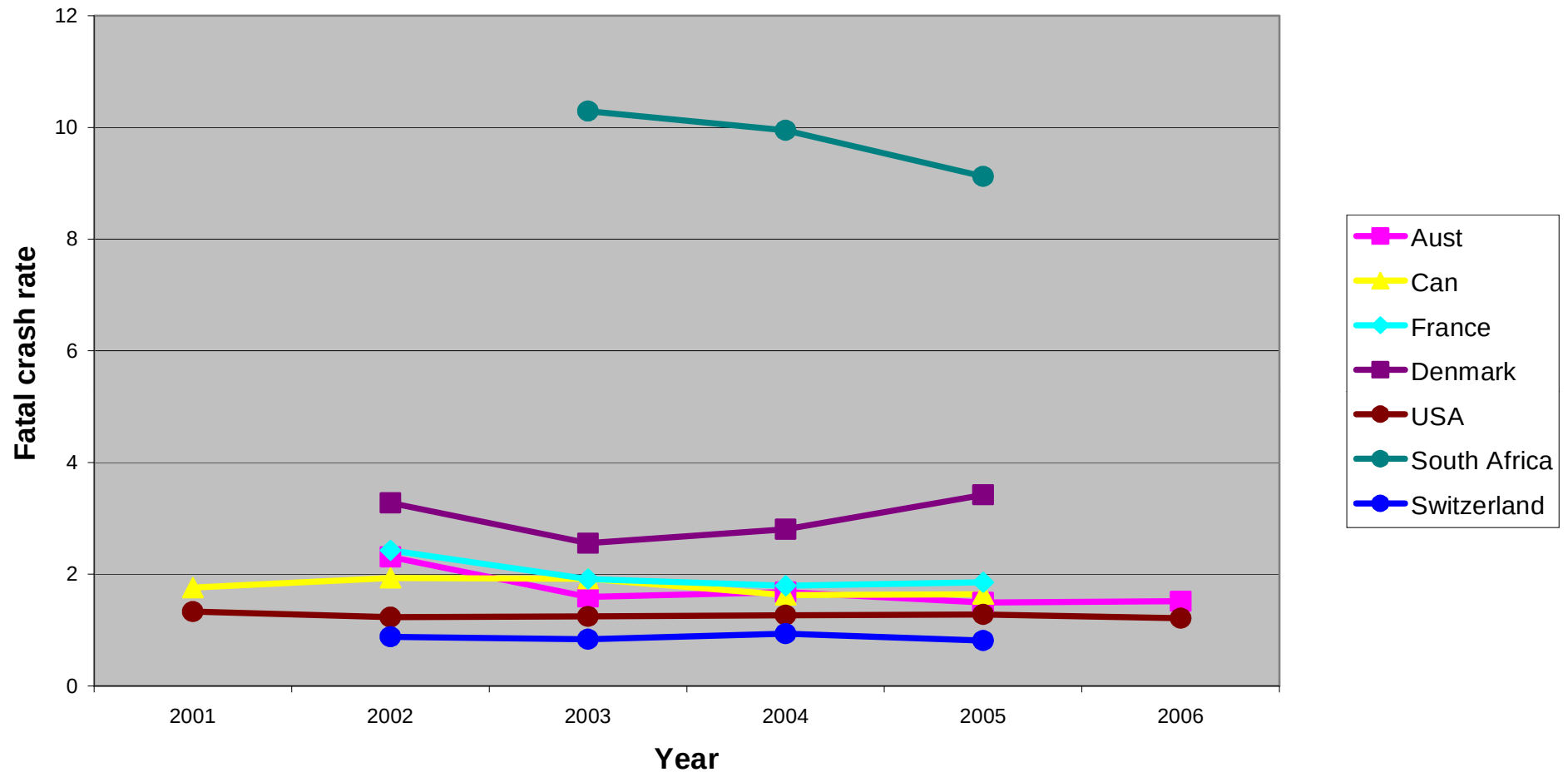
South African Road Network

Rank	Country		Road length (km)
		<i>World</i>	64 285 009
1		United States	6 586 610
2		India	4 689 842
3		China	4 237 500
4		Brazil	1 751 868
5		Japan	1 210 251
6		Canada	1 042 300
7		Russia	982 000
8		France	951 200
9		Australia	823 217
10		South Africa	750 000
11		Spain	681 298
12		Germany	644 480
13		Sweden	572 900
14		Italy	487 700
15		Indonesia	437 759
16		Turkey	426 906

International Road Fatality Statistics



Heavy Vehicle Fatal Crash Rates



Fatal truck crash per 100 million vehicle kilometres travelled

Source: OECD report, Moving Freight with Better Trucks, 2010



Reality Check: Roads



Brake & Tyre Watch Training Events

Location	Inspected	Discontinued	%
City Deep	24	21	88%
Middelburg	35	24	69%
Centurion	41	17	42%
Midway KZN	26	10	38%
Kroonstad	8	7	92%
Brackenfell, W. Cape	25	25	100%
Pietermaritzburg	12	11	92%
Port Elizabeth	15	6	40%
Rustenburg	7	5	72%
Polokwane	11	10	91%
Midway KZN	24	20	83%
Bloemfontein	24	20	83%
Nelspruit/Komati	13	12	92%
TOTAL (37 events)	707	482	68%

38 B&TW
events
from Feb.
2006 to
date

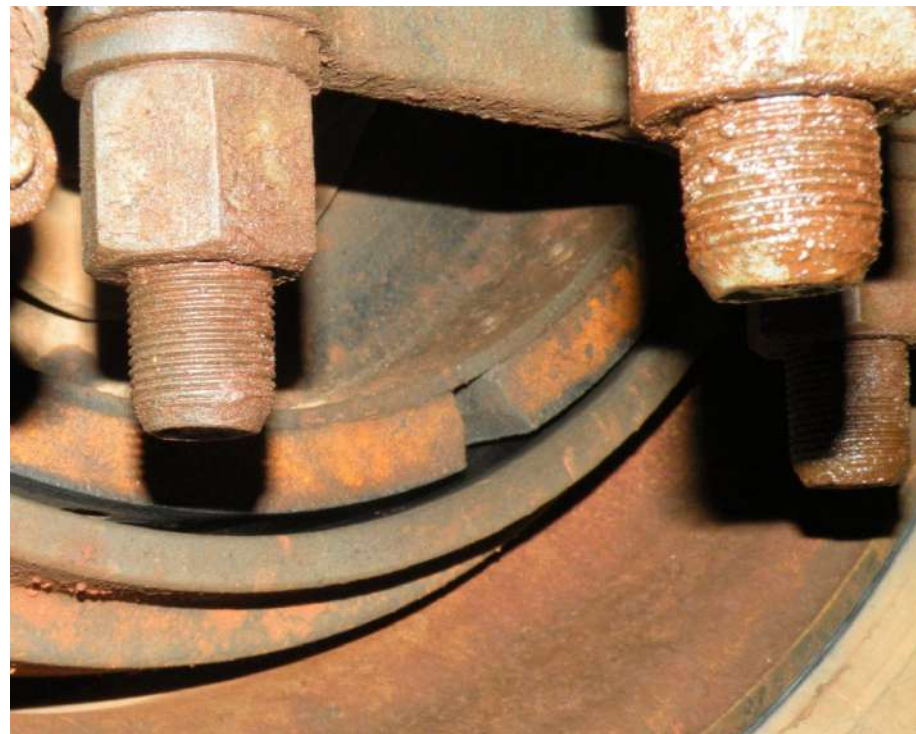
A *FleetWatch* Initiative

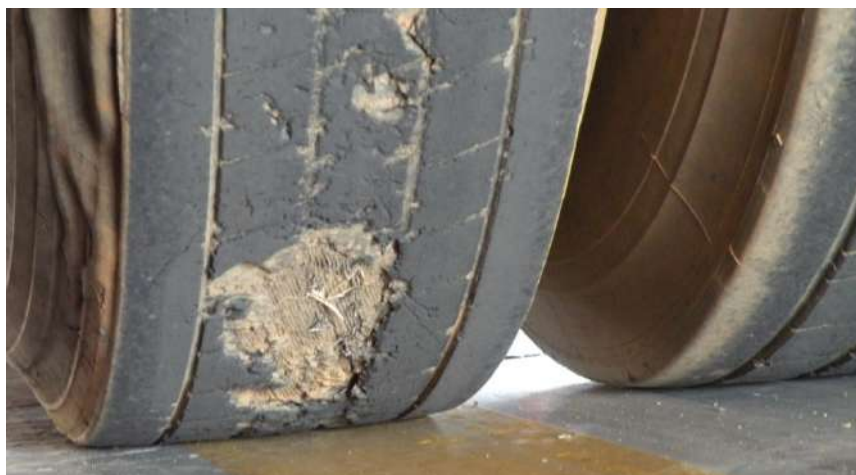


A *FleetWatch* Initiative



Brake & Tyre Watch







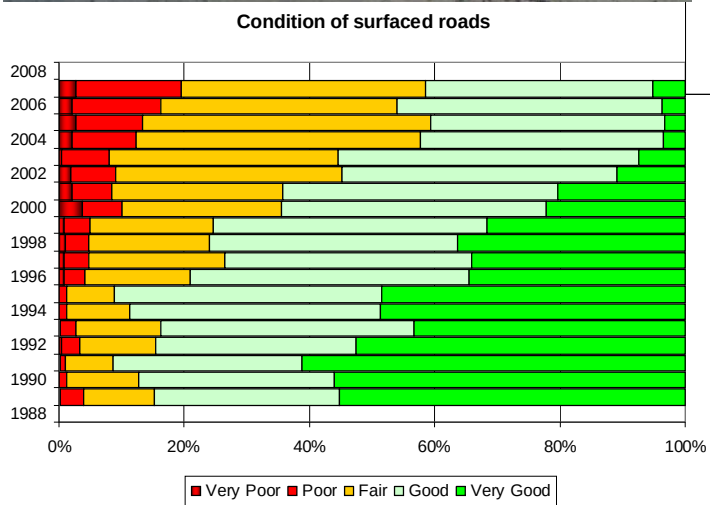
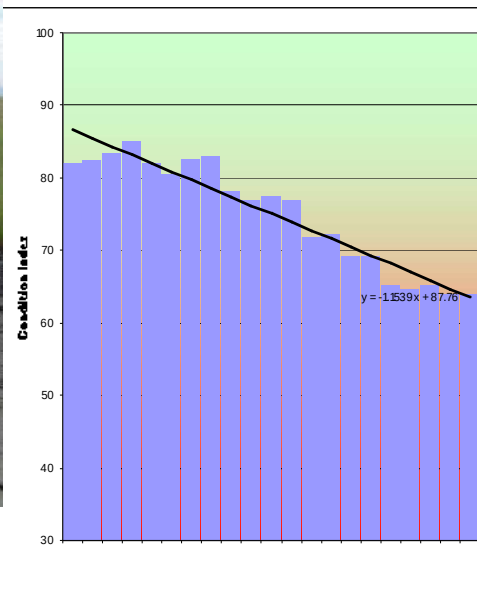
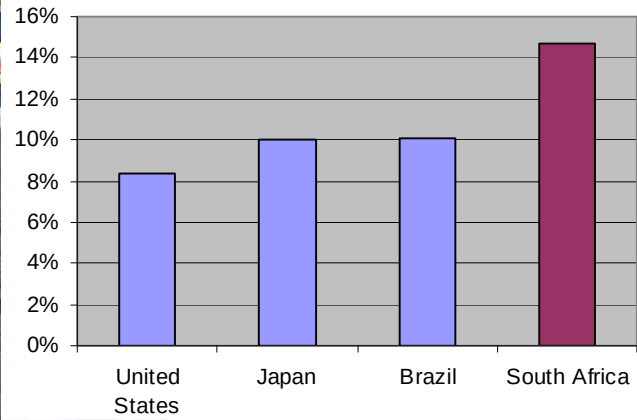
A **FleetWatch** initiative



Brake & Tyre Watch







**Road
Safety**

**Infrastructure
Protection**

**Fair Competition
between modes &
operators**

OVERLOAD CONTROL

**National Overload Control Strategy
Implemented by National, Provincial and Local
Authorities**

Infrastructure & Equipment

- Main routes (major facilities)
- Alternative routes (minor facilities/screening)
- Monitoring (HS-WIM)
- Alternative weighing equipment
- Private weighbridges

Self-regulation

- Road Transport Management System (RTMS)
- Performance-Based Standards (PBS)

Legislation

- Consignors/Consignees
- 5% Tolerance
- User charges
- Habitual Overloaders
- Public Prosecutors
- Alternative weighing equipment
- AARTO

Information sharing & Public Awareness

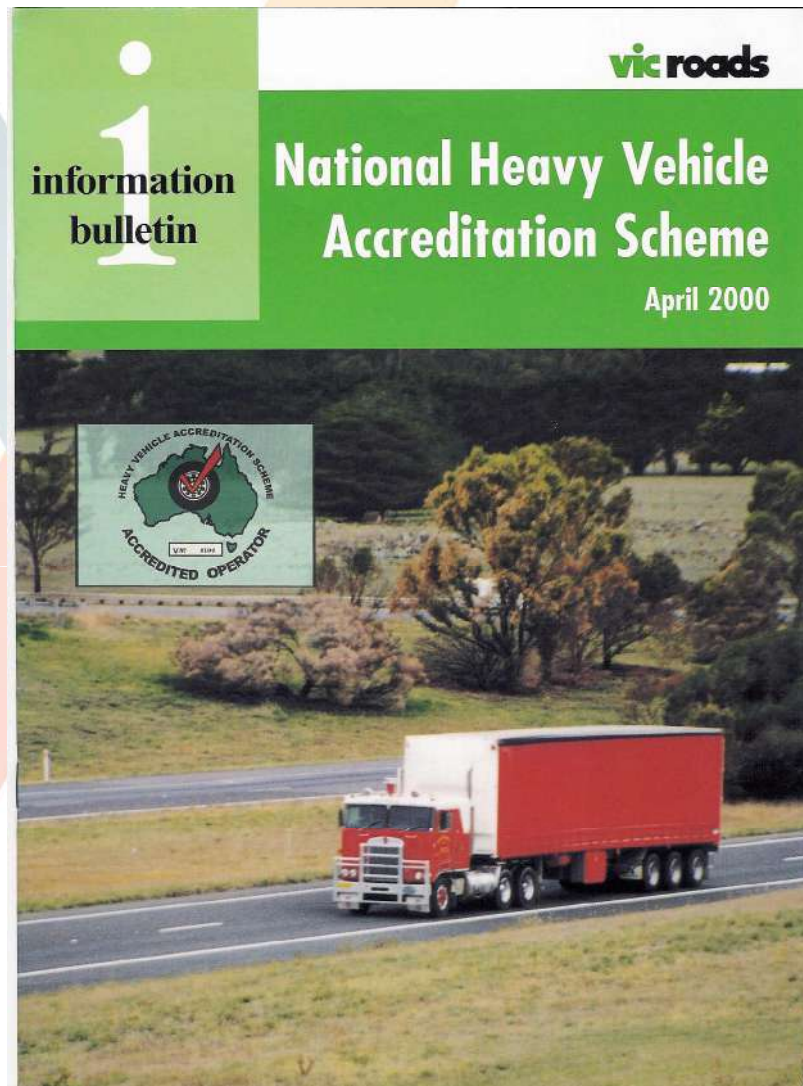
- Overload website
- Overload information booklet

Operations

- Human Resources
- PPP
- Training
- Guideline document for law enforcement

Co-operation

- Provinces
- Local authorities
- Department of Justice
- Private sector



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Edition 1

SOUTH AFRICAN NATIONAL STANDARD

Road transport management systems

Part 1: Operator requirements — Goods

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The Road Transport Management System

RTMS is an **industry-led**, **government-supported**, **voluntary**, self-regulation scheme that encourages **consignors, consignees and road transport operators** to implement a **management systems standard** with outcomes that contribute to **preserving road infrastructure, improving road safety and increasing productivity**.

Key focus areas are:

- load optimisation (minimise over- and under-loading)
- driver wellness
- vehicle maintenance
- productivity

Key Elements in Road Freight Transport

- Road infrastructure: roads, bridges, roadside furniture, signs, road markings, etc.
- Vehicles: design, maintenance & operation
- Drivers: skill, health, fatigue

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RTMS Structured Approach

- Clear definition of transport processes
- Develop policies and procedures
- Identify transport risks, including route risks
- Monitor key performance areas using defined tools (e.g. driving hours using telematics)
- Identify key outliers (non-conformances) and demonstrate evidence of appropriate mitigation
- Evaluate conformance to key performance areas
- Ensure management functions (internal audits & management review) are implemented in keeping with the concept of self-regulation

Practical requirements of the RTMS

RTMS STANDARD SANS 1395-1– MAJOR CRITERIA			
LOADING CONTROL	SAFETY & COMPLIANCE	DRIVER WELLNESS	TRAINING & DEVELOPMENT
✓ Payload Optimisation with minimisation of overloading ✓ Compliance with dimensional limits ✓ Safe Loading to prevent incidents ✓ Compliance with legal loading limits and/or applicable permit	✓ Daily Roadworthy verification ✓ Preventive Maintenance Process ✓ Tyre Management ✓ Prevent habitual speed exceedances ✓ Prevent excessive driving hours ✓ React to Accidents/Incident ✓ Monitor Traffic Offences ✓ Route Risk Analysis ✓ Active Promotion of Road Safety	✓ Medical Fitness verification ✓ Management of Chronic Conditions ✓ Driver Resting Period monitoring ✓ Driving Hours Monitoring ✓ Risk Awareness	✓ Annual Training Plan ✓ Focus on defensive driving, legal loading, fatigue management, with emphasis on the promotion of safe driving behaviour ✓ Mentoring, monitoring, counselling, awareness and education ✓ Training Records





transport

Department:
Transport
REPUBLIC OF SOUTH AFRICA

INVITATION



Dear Road Transport Stakeholder

You are cordially invited to attend a Road Transport Management System workshop as a guest of the RTMS committee. Details are as follows:

- Date** : **Wednesday, 18 October 2017**
- Venue** : **Auditorium, Toyota Head Office**
Pretoria Main Road
Wesco Park, Sandton, Johannesburg
<http://www.toyota.co.za/contact-us>
GPS co-ords: S 26.085 : E 28.087
- Registration** : **from 07h30 (tea/coffee available)**
- Workshop Time** : **08h30 – 14h00 including a light lunch**
- RSVP** : **Please register online at**
<http://www.rtms-sa.org/node/12>



Road Transport Management System

RTMS

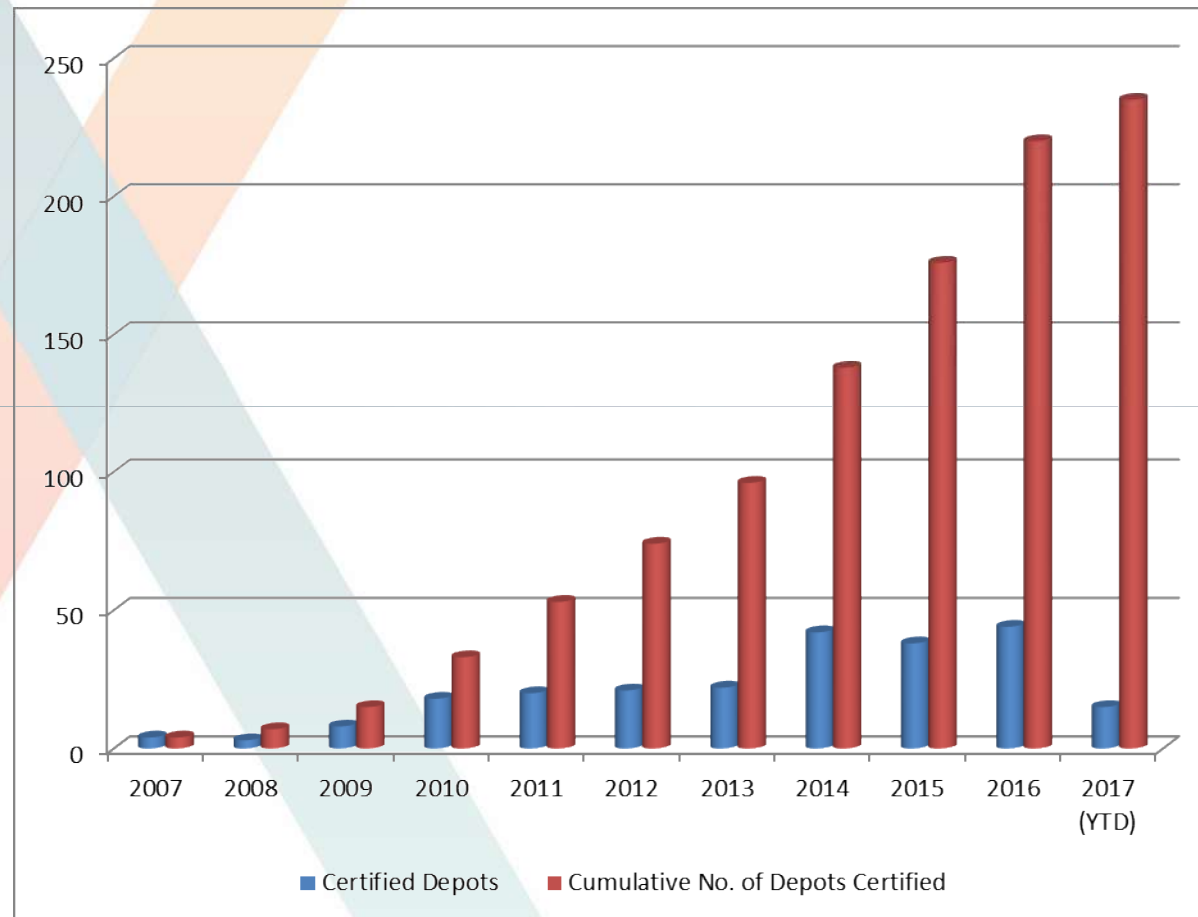
Driver Wellness • Safety • Loading • Productivity







Growth of the RTMS in South Africa

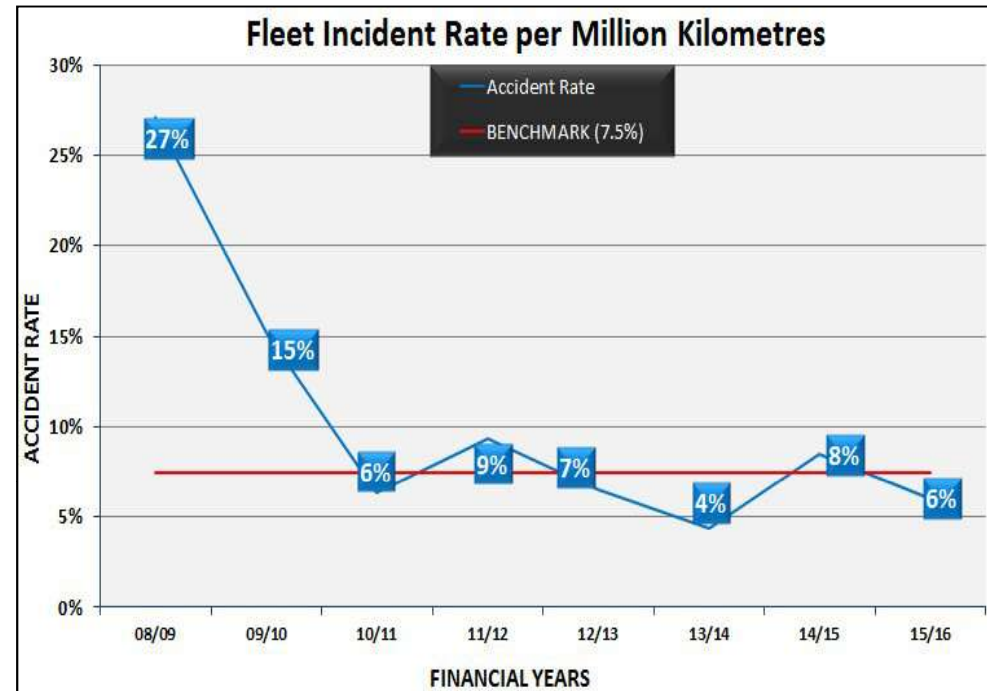
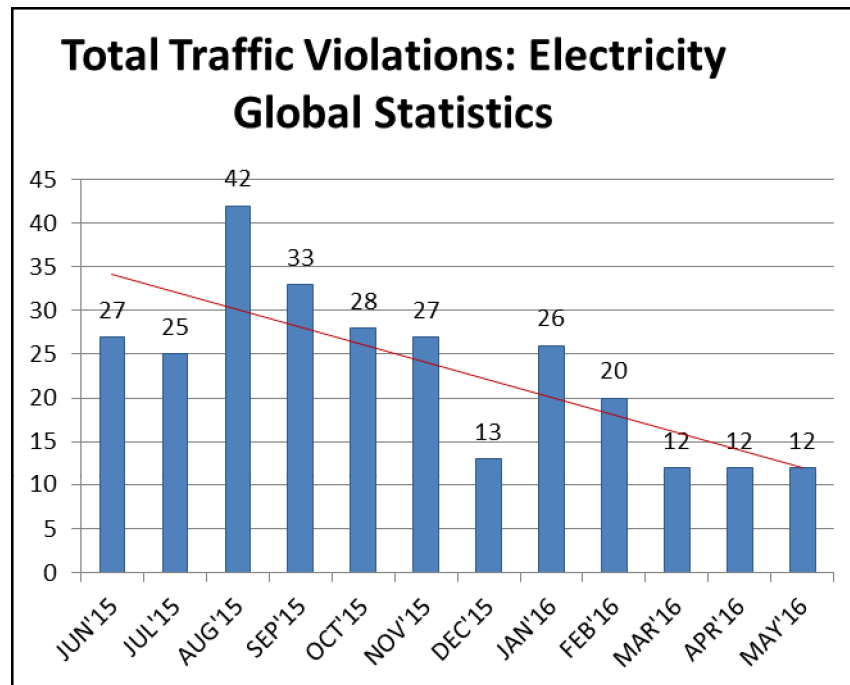


Over 240 fleets representing over 11 200 trucks & buses (In 2007 there were 74 certified vehicles)

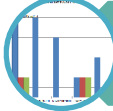
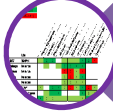
Four bus operators:

- Buscor 420 buses
- Intercape 160 coaches
- GABS 1100 buses
- Intestate 237 buses

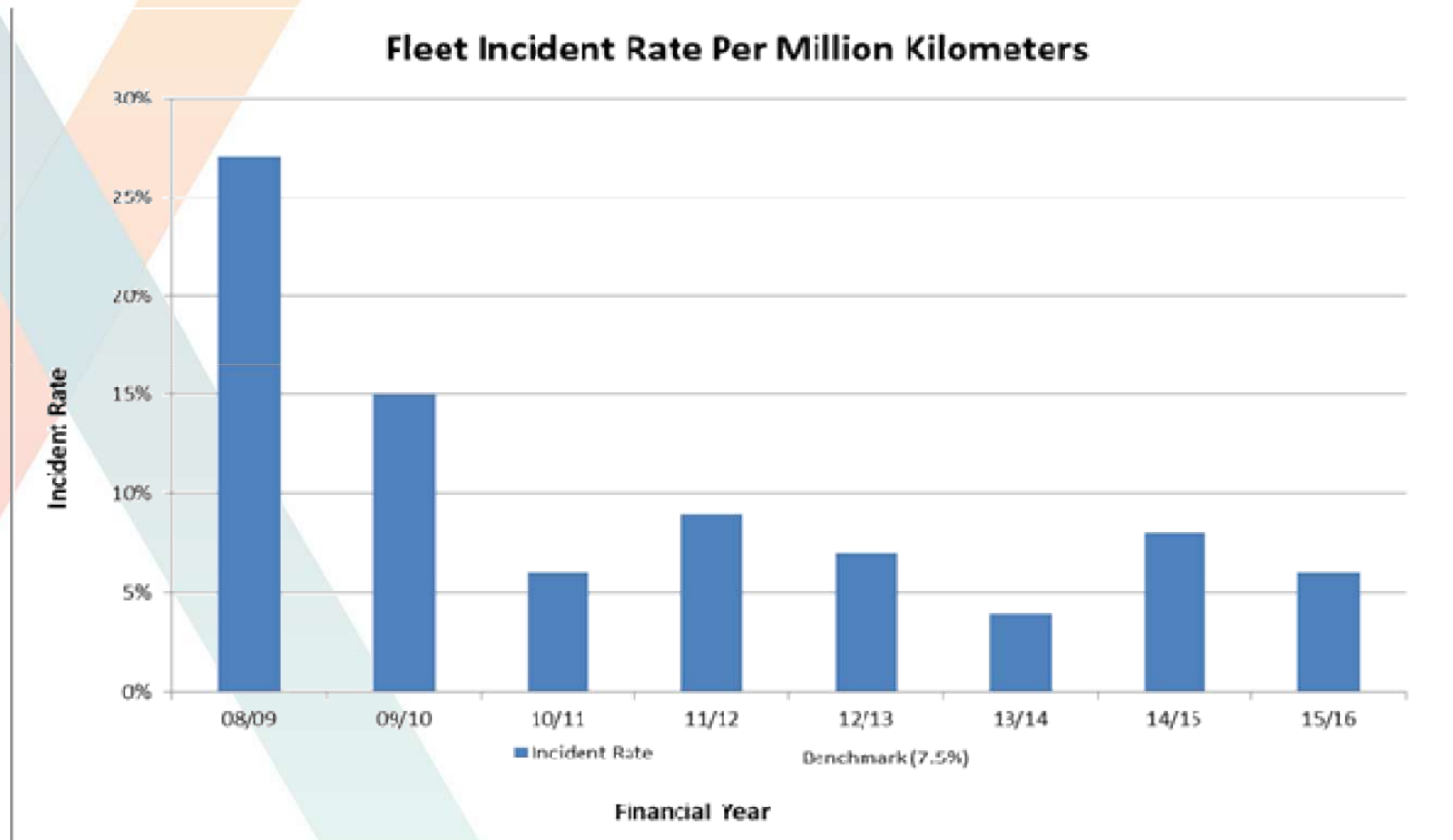
City of Cape Town: Reduction in Traffic Violations and Crashes



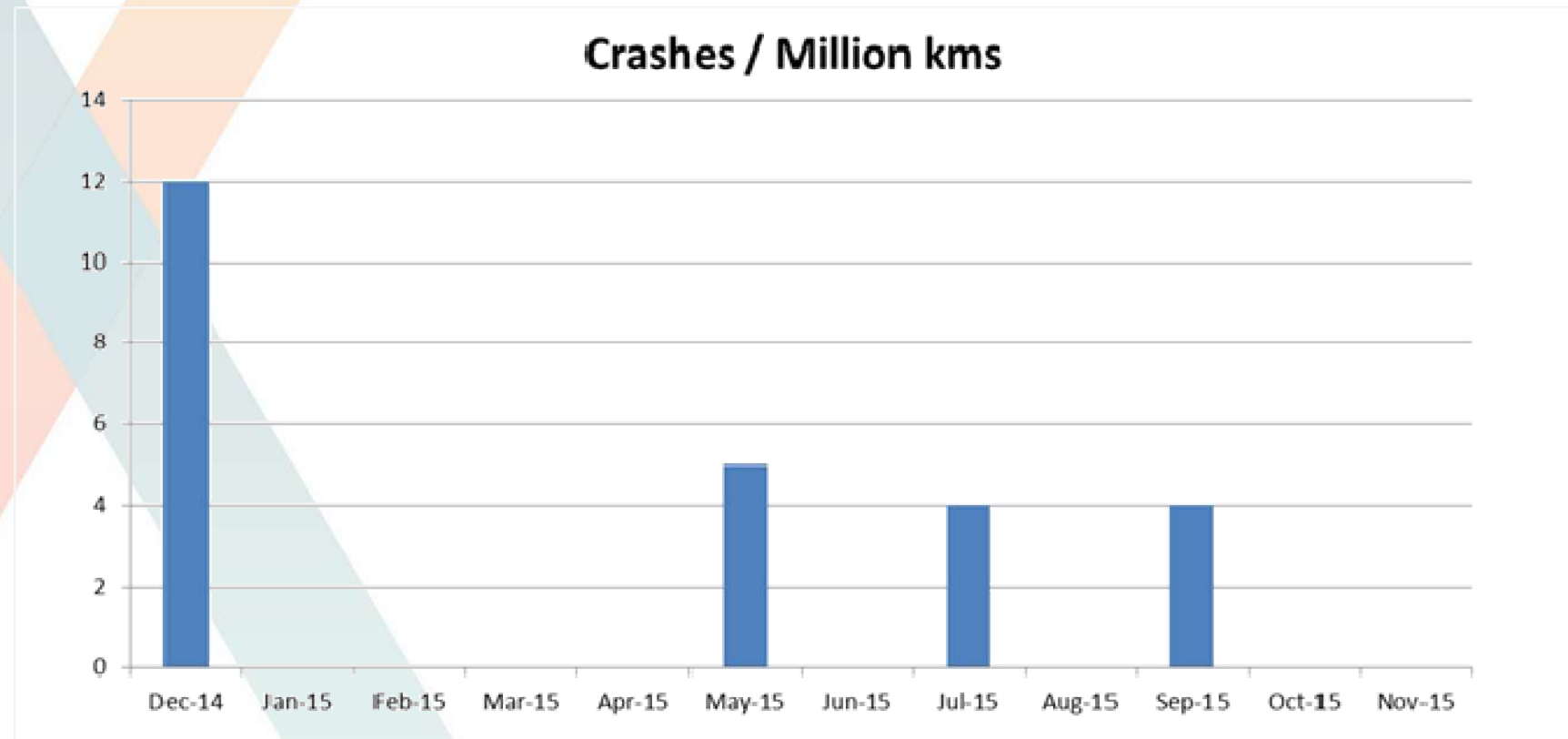
-  Traffic violations measured and monitored monthly
-  Monthly reporting to management
-  Driver training according to requirements
-  CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

-  Accidents and incidents measured and monitored monthly
-  Monthly reporting to management
-  Driver training according to requirements

City of Cape Town: Reduction in Incidents



Premier FMCG: Reduction in Crashes

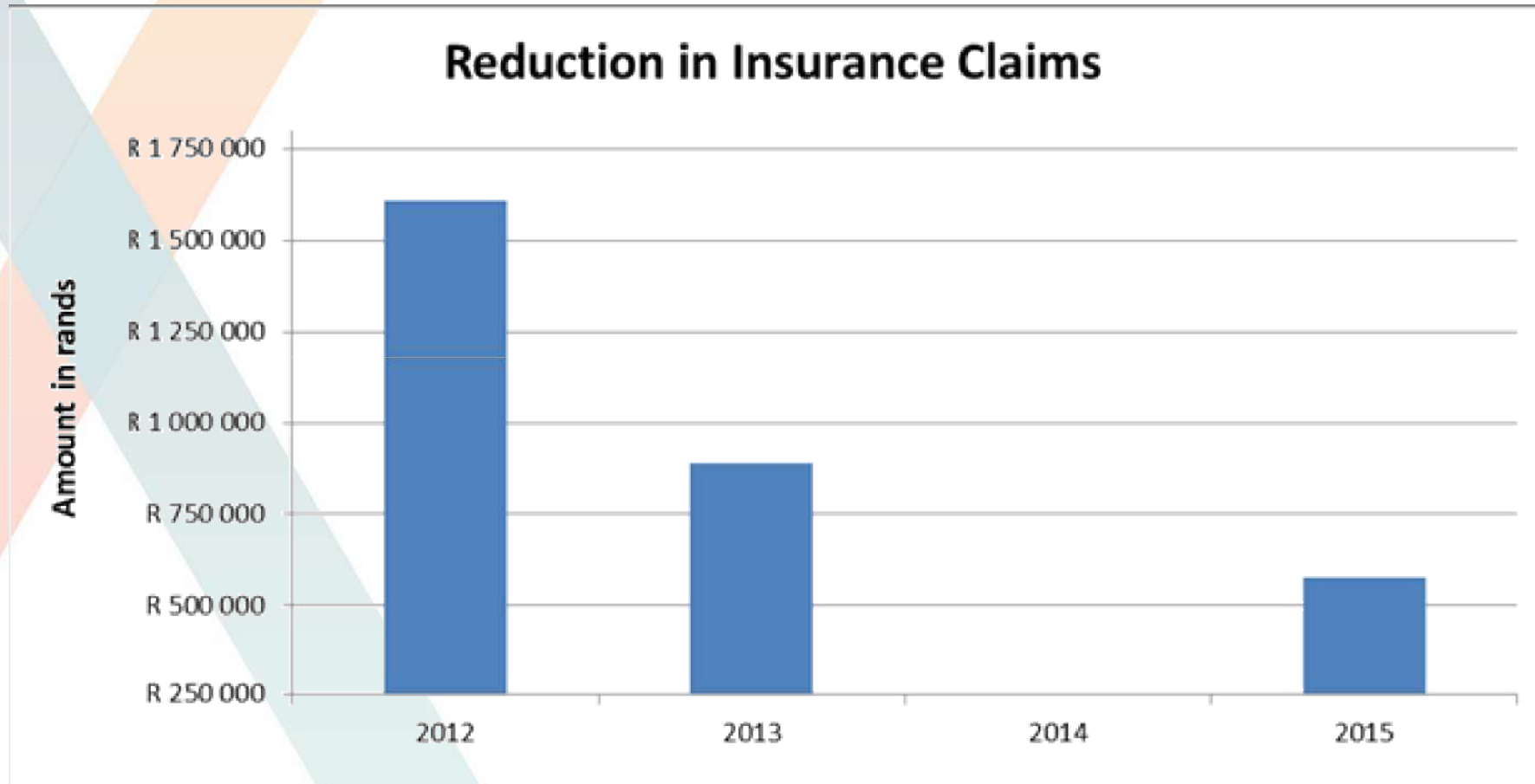


Unitrans sugar: Reduction in Crashes

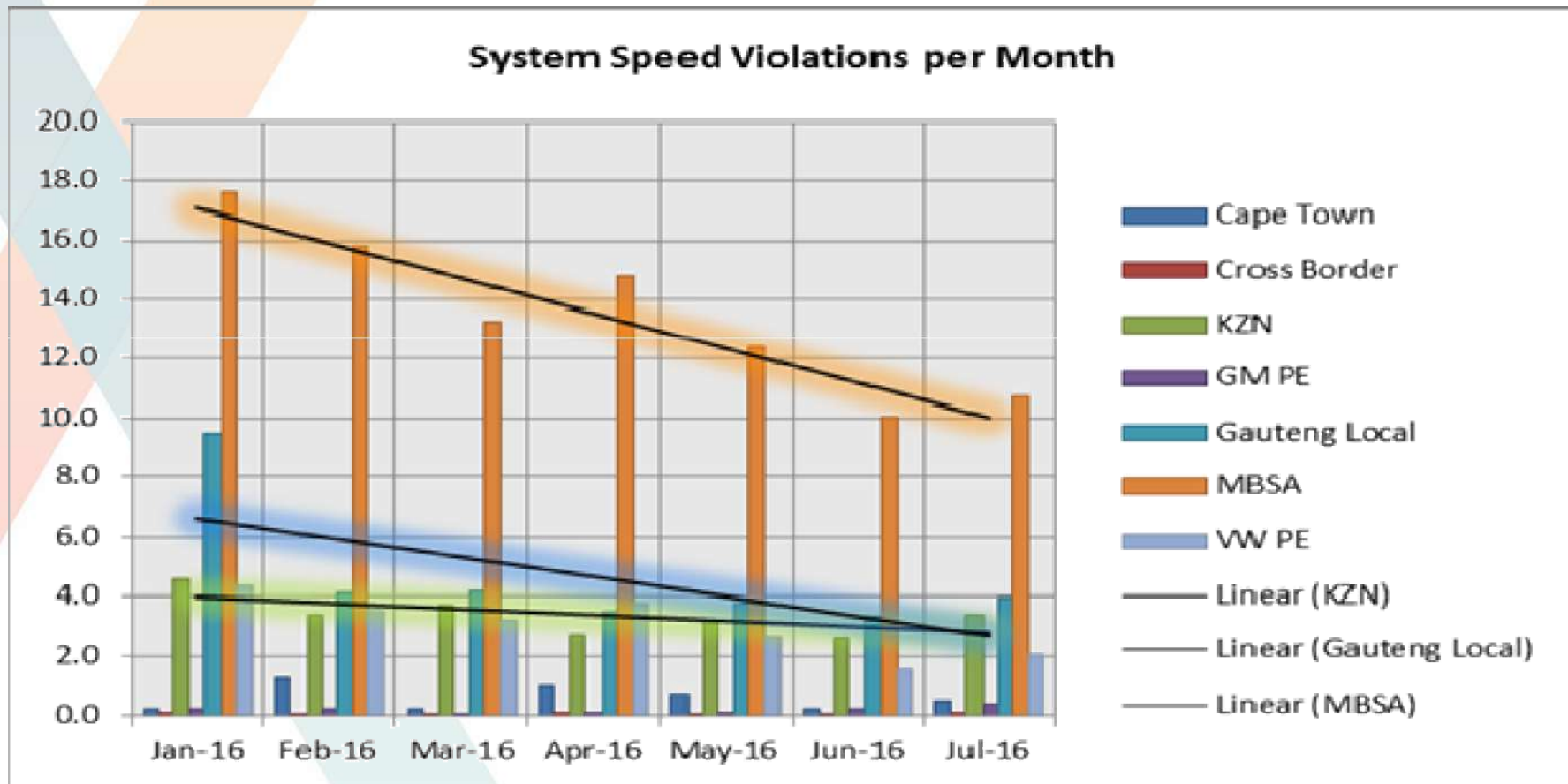
Reduced crashes and incidents over R30 000 damage (July to June):

- 2006 / 2007 – 20 crashes, 6 serious
 - » Accident damage – 67 cpk or 5% of revenue
- 2007 / 2008 – 9 crashes, 5 serious
 - » Accident damage - 76 cpk or 5% of revenue
- 2008 / 2009 – 3 crashes, 1 serious
 - » Accident damage – 103 cpk or 6% of revenue
- 2009 / 2010 – 4 crashes, 1 due to driver falling asleep.
 - » Accident damage – 40 cpk or 2.0% of revenue
- 2010 / 2011 – 3 crashes, 2 due to driver negligence.
 - » Accident damage - 27 cpk, or 1.3% of revenue
- 2011 / 2012 – 5 crashes, 2 due to driver negligence.
 - » Accident damage - 29 cpk or 1.3 % of revenue

ZZ2 (Tomato producers): Reduction in Insurance Claims



Vehicle Delivery Services: Reduction in Speed violations



Dawn Logistics

BEST PRACTICES RTMS



◆ Fleet manager of Dawn Logistics, Danielle Diederik and MD Graeme Johnston proudly hold their RTMS certificate presented by members of the RTMS Steering Committee. From left: Kathy Bell, Adrian van Tonder, Paul Hordengren and Oliver Noakes.



▲ The lady who drove the process, fleet manager Danielle Diederik.



◆ It was a proud day for managers from around the country when they received their individualized RTMS Accreditation certificates from the RTMS Steering Committee members.



▲ Dawn Logistics National Driver of the Year (Thamsanqa Sibiso (center)) was also honoured along with Associates of the Year Sello Samuani (left) and Lethabo Mole.

Embracing the RTMS challenge

If ever you're looking for an example of the vast improvements that can accrue in all areas of a transport company's operations via the implementation of the Road Transport Management System (RTMS), look no further than Dawn Logistics writes Patrick O'Leary.

POSITIVE RESULTS AND OUTCOME AFTER IMPLEMENTING RTMS

Weighbridges or weigh mats at all depots:

All trucks are weighed before exiting and any defaults are fixed before trucks leave the yard

- 2013 and before = unknown
- 2014 = 3
- 2015 = 0

Risk of breakdowns/crashes/fines:

Strict daily routine inspections and regular tyre surveys, maintenance checks have improved our downtime, and any issues are repaired before trucks leave.

YEAR	FINES	CRASHES	DRIVER ERROR	BREAKDOWNS
2013	218	37	19	57
2014	232	26	11	46
2015	56	17	5	33
2016	28	26	4	20

Fuel consumption

Consistent improvement. Fuel monitored on a daily basis and we are running above industry average.

Since implementation, fuel consumption has improved by 20%

Primarily as a result of improved driver behaviour – defensive and economical driving, reduction in harsh braking and speeding.

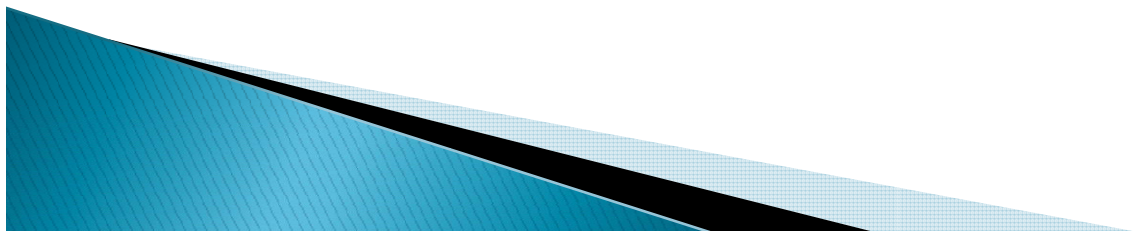
Speeding occurrences

2013: Unknown

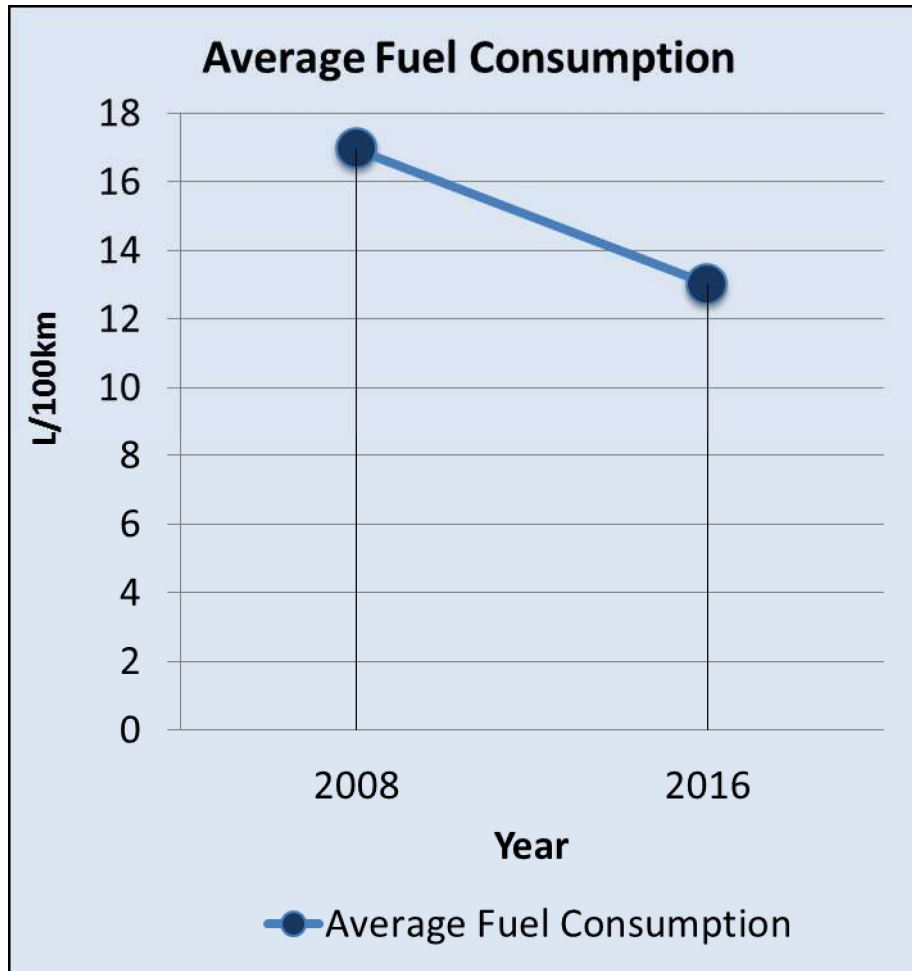
2014: 60 127 (299/truck/yr)

2015: 8 689 (34/truck/yr)

2016: 4 722 (18/truck/yr)



City of Cape Town: Efficiency Improvements



Fuel Consumption Improved from 17l/100km to 13l/100km



Carbon footprint improved by 24%



Cost savings on fuel =R5.7 Million

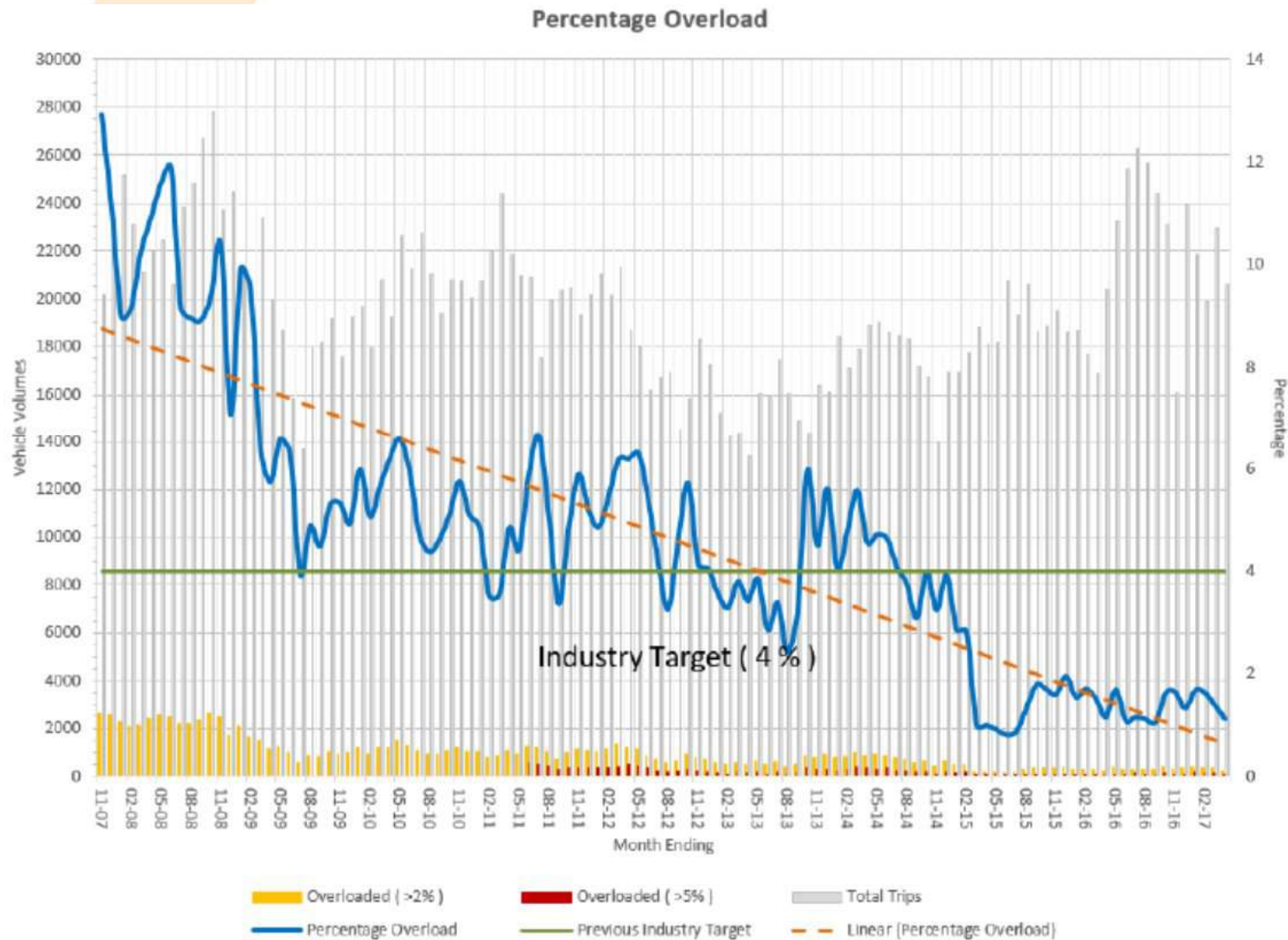


Cost savings on repairs and maintenance =R4.2 Million (2016FY)

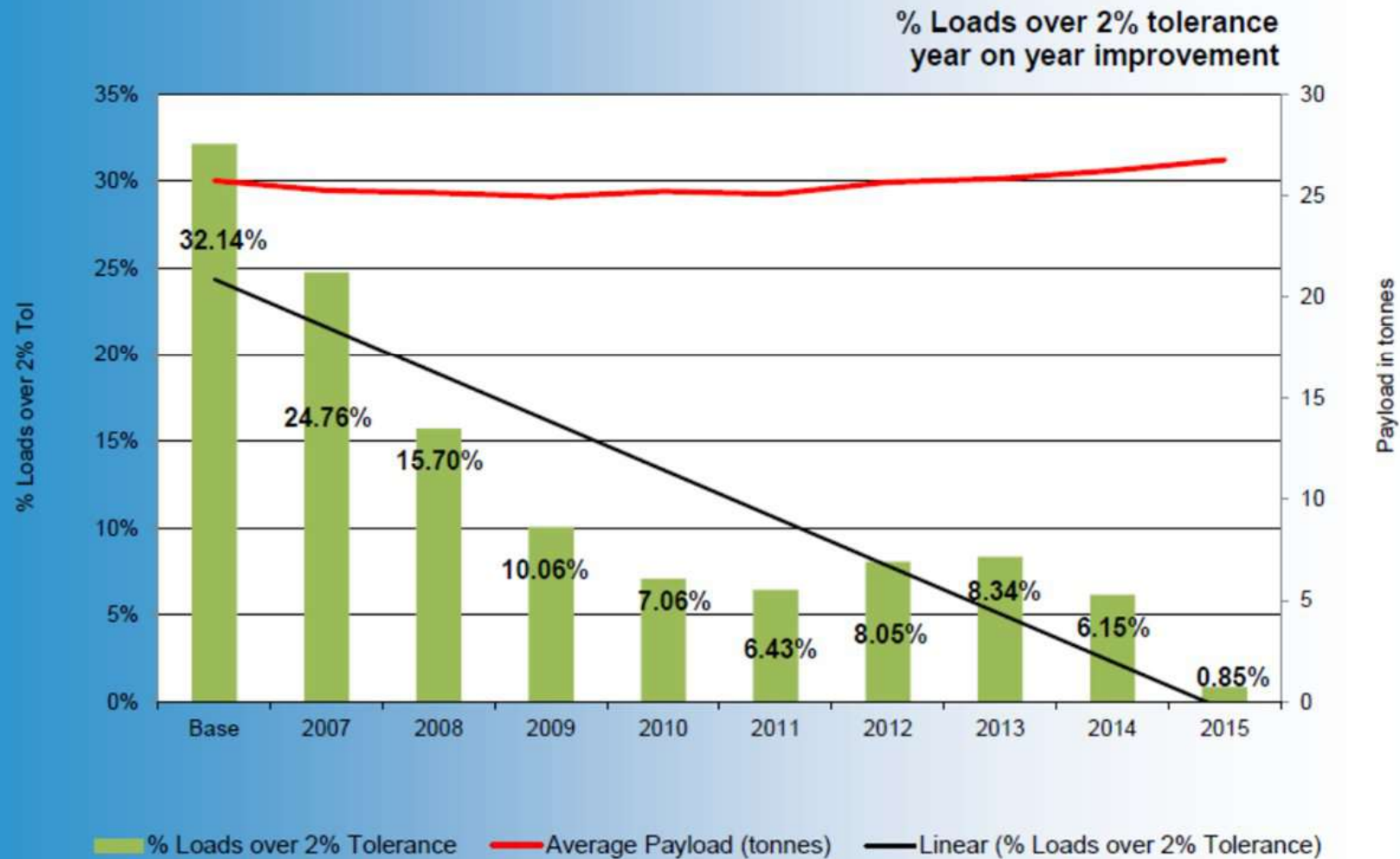


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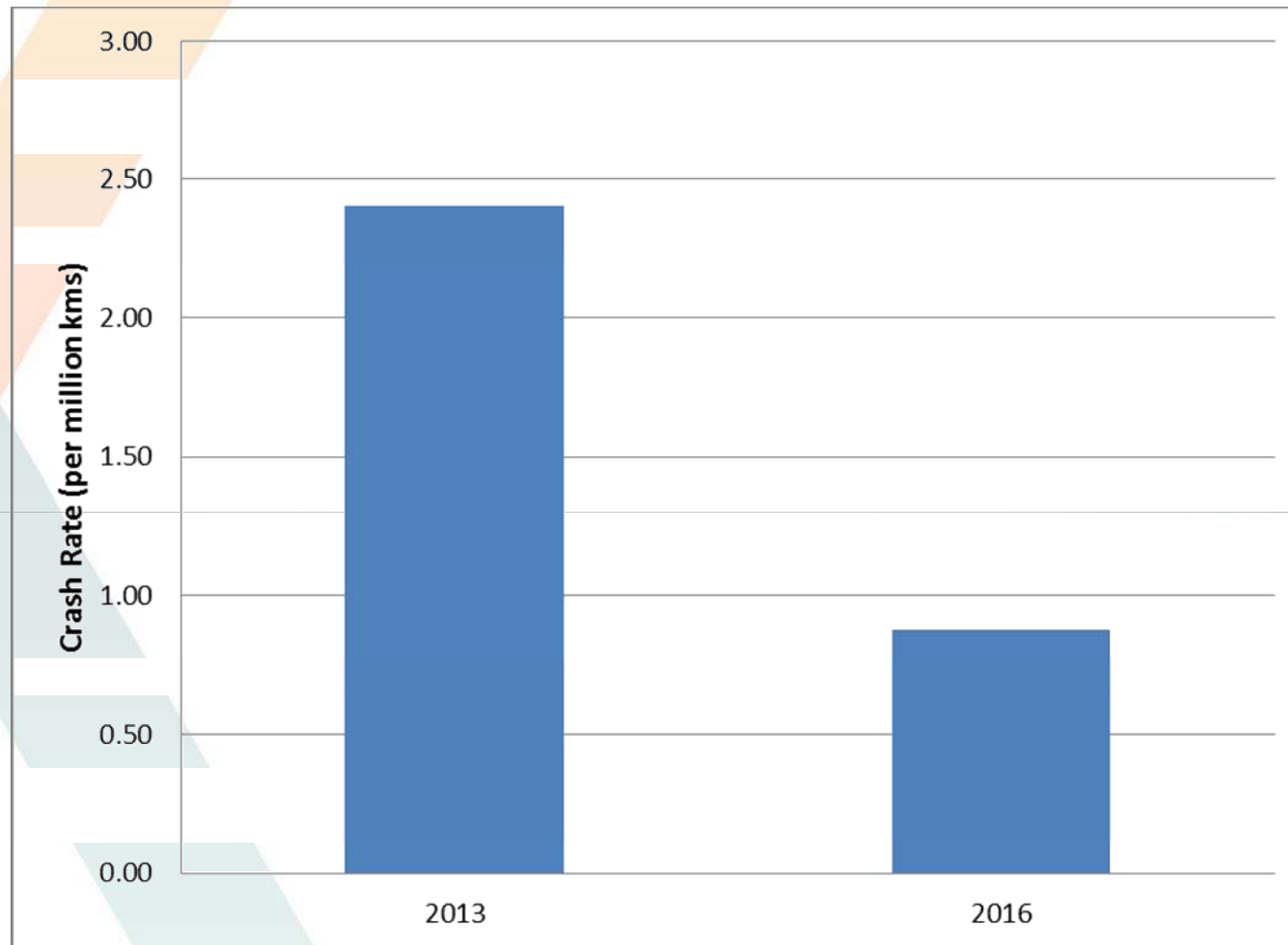
RTMS: Overloading trend in forestry



RTMS: Overloading trend in sugar



Crash rate of RTMS-certified fleets



2013/1: 24.1 million kms

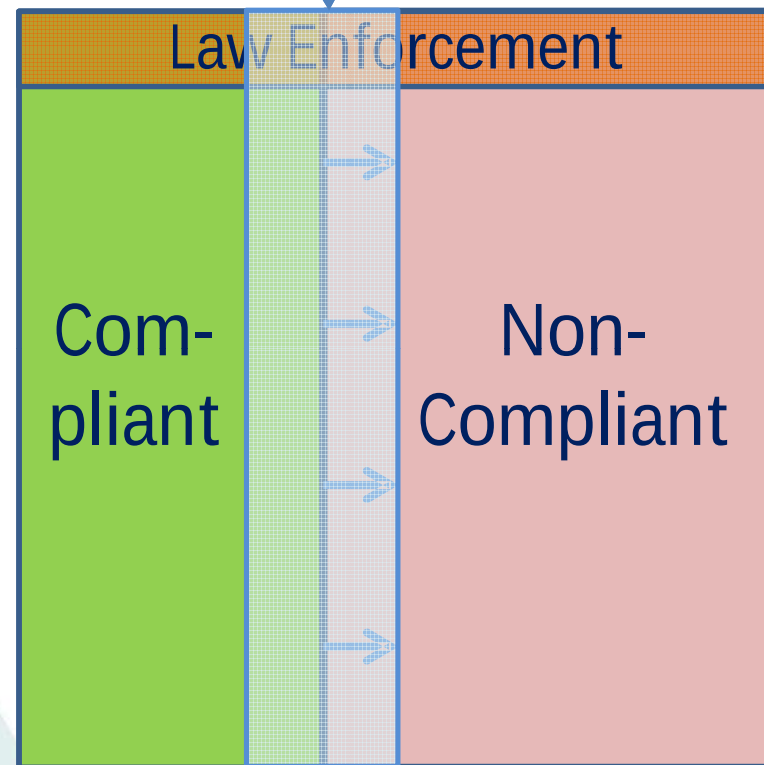
2016/1: 94.2 million kms

Estimated savings per annum: US\$ 10 million

RTMS qualitative benefits

- Reduced turnover of drivers due to HIV-related issues;
- Improved standard of living of drivers;
- Improvement in driver wellness, resulting in a consequent decrease in absenteeism;
- Reduction in breakdowns and drivers reporting breakdowns;
- Improved fleet utilisation (reduced downtime);
- Improved driver behaviour;
- More control and confidence in the company;
- Reassurance that drivers are medically fit to drive a heavy vehicle; and
- Improved motivation of employees

RTMS



Conclusions

- The RTMS self-regulation accreditation scheme has been successfully implemented in South Africa and has gained considerable momentum during the past 5 years
- The RTMS has been shown to add significant value to an operator's compliance, safety performance, efficiency and productivity
- Recognition and support of the RTMS by consignors and consignees is critical to its long-term success and demonstrates their commitment to good corporate governance and sustainability
- The success of the RTMS in South Africa can also be attributed to the support clearly demonstrated by the Department of Transport and other stakeholders

A *FleetWatch* Publication

RTMS

Road Transport Management System



**Voluntary Self-Regulation Programme
FOR THE TRUCKING INDUSTRY**



THANK YOU

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our future through science