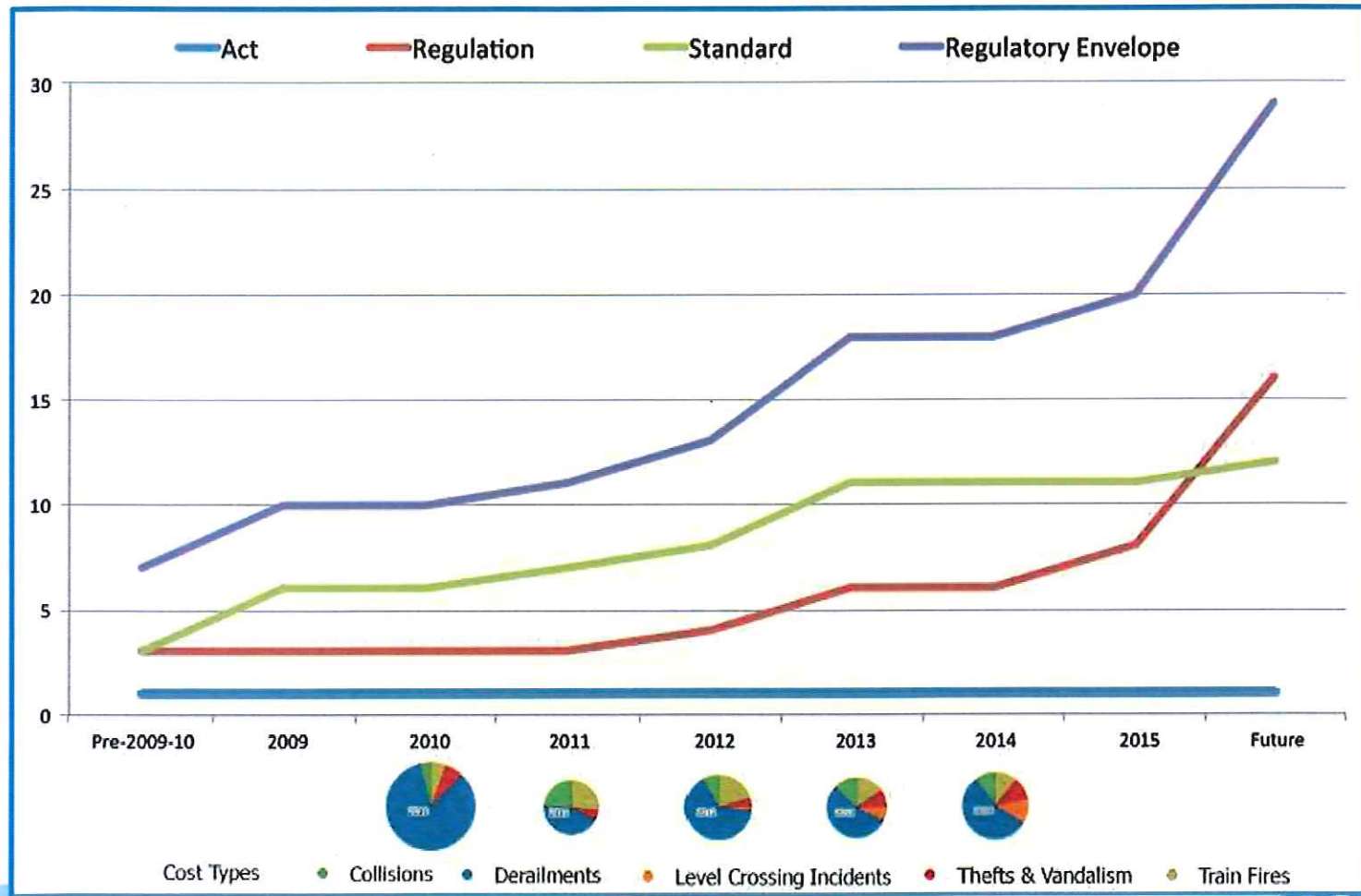


RSR REGULATORY IMPACT ASSESSMENT



RSR REGULATORY IMPACT ASSESSMENT

- Cost-Benefit analysis of TFR and Prasa over period 2010/11 to 2014/15
- Cost of occurrences (costs) versus Value Add of transported goods (benefits)
- Findings :
 - Gaps in terms of RSR Regulatory Framework identified:
 - Rail Reserve / access control
 - Security issues regarding theft and vandalism
 - Collisions main cost driver for TFR
 - Train fires (arson and electrical) main cost driver for PRASA
- 0.1% Cost of Risk discriminator introduced to identify High risk railway lines / corridors
- Outcomes will inform RSR Regulatory Framework development and focus of planning of RSR Interventions

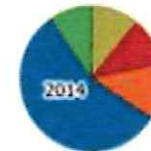
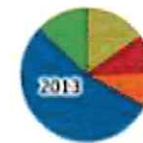
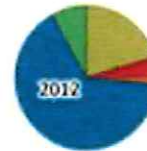
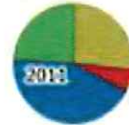
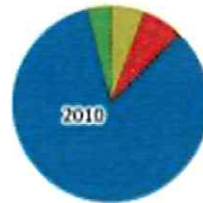
RSR REGULATORY IMPACT ASSESSMENT

All Declared Occurrence Costs

All Declared Occurrence Costs	2010	2011	2012	2013	2014
Collisions	R 51,935,614	R 119,358,821	R 57,213,825	R 79,158,686	R 71,689,806
Derailments	R 1,100,273,774	R 214,350,640	R 473,834,347	R 331,559,222	R 409,499,407
Level Crossing Incidents	R 3,629,215	R 1,419,922	R 10,813,276	R 51,684,953	R 90,968,439
Theft & Vandalism	R 86,418,282	R 28,510,781	R 31,899,539	R 54,479,808	R 77,877,882
Train Fires	R 73,250,178	R 133,267,888	R 148,040,687	R 94,860,941	R 79,484,679

Cost Types

- Collisions
- Derailments
- Level Crossing Incidents
- Thefts & Vandalism
- Train Fires



TFR OCCURRENCE COSTS

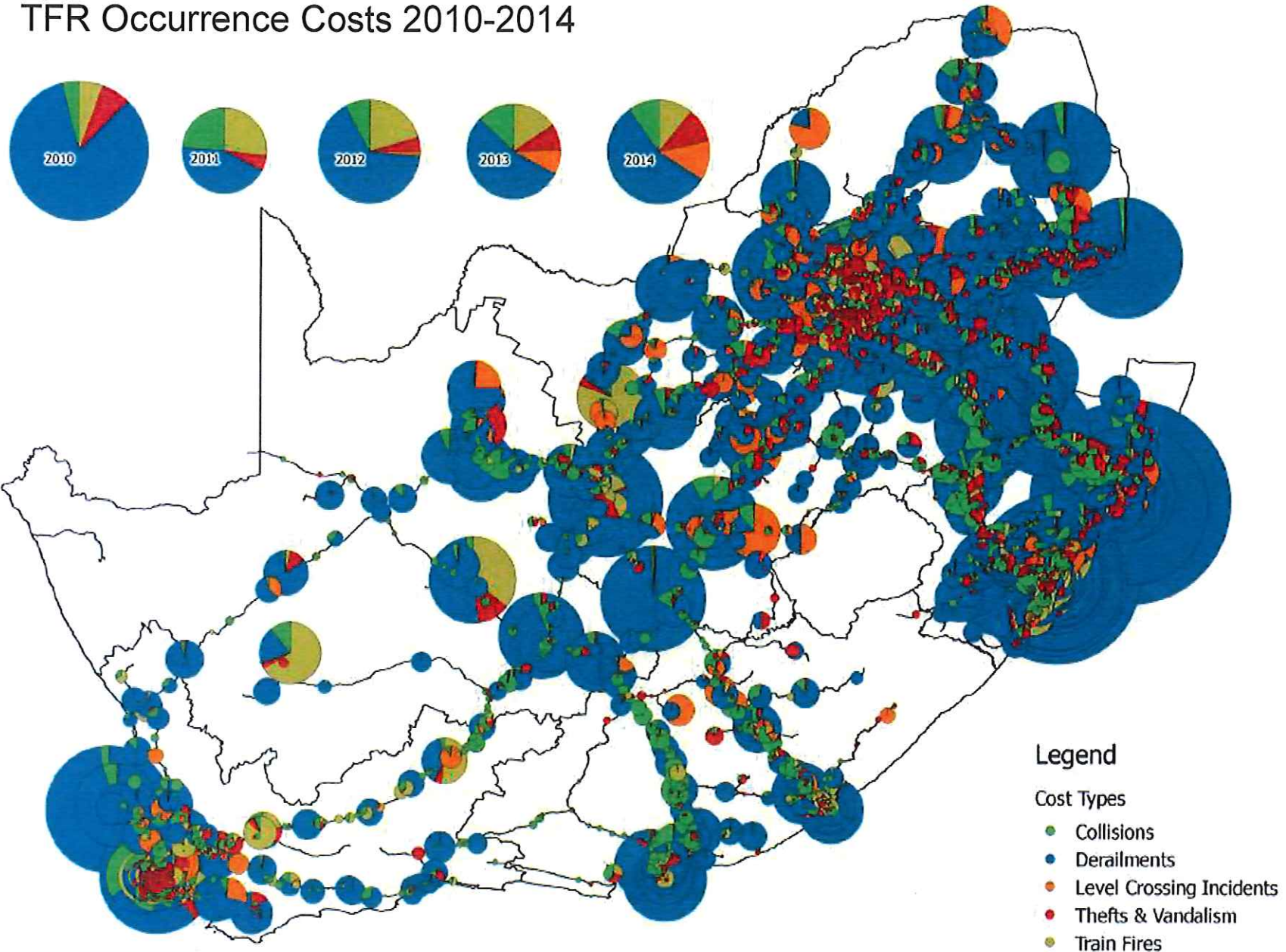
Description	Category	Costs [R MILLION]					
		2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Theft & Vandalism	Cables	54.3	68.2	19.2	21.4	34.6	51.6
Theft & Vandalism	Doors & Windows	0.3	0.4	0.01	0.4	0.5	0.03
Arson	Rolling Stock	NIL	19.3	NIL	NIL	NIL	NIL
Train Fires	Rolling Stock	4.9	8.6	7.11	30.3	11.6	0.17
Level Crossing Occurrences	R/S & Perway	25.9	3.0	0.62	8.1	46.9	72.7
Collisions	R/S & Perway	6.8	25.4	53.5	24.2	60.1	62.9
Derailments	R/S & Perway	276.4	816.3	148.1	304.1	258.1	293.1
GRAND TOTAL		368.6	941.2	228.5	388.5	411.8	480.5

Table 7: TFR cost of operational occurrences and security-related incidents from 2009/10 to 2014/15 reporting period without inflation adjustment

Note : as per State of Safety report for period 2014/15



TFR Occurrence Costs 2010-2014



TFR COST OF RISK PROFILE

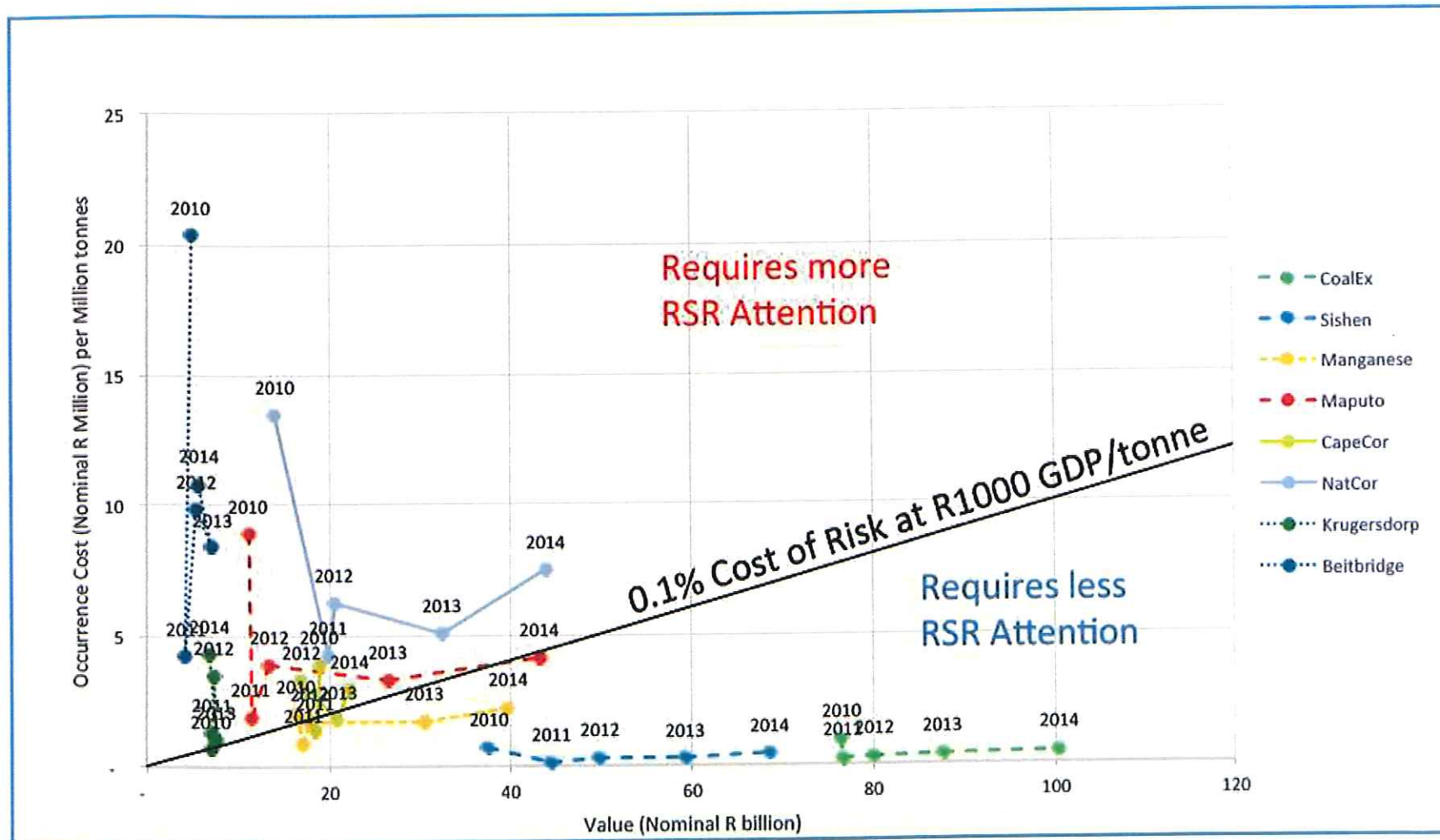


Figure 9: Freight Cost of Risk rated Occurrence Cost (Nominal Rand million / Million Tonnes) vs. Transportable GDP (2015 Rand billion) by Corridor (2010-2014)

PRASA OCCURRENCE COSTS

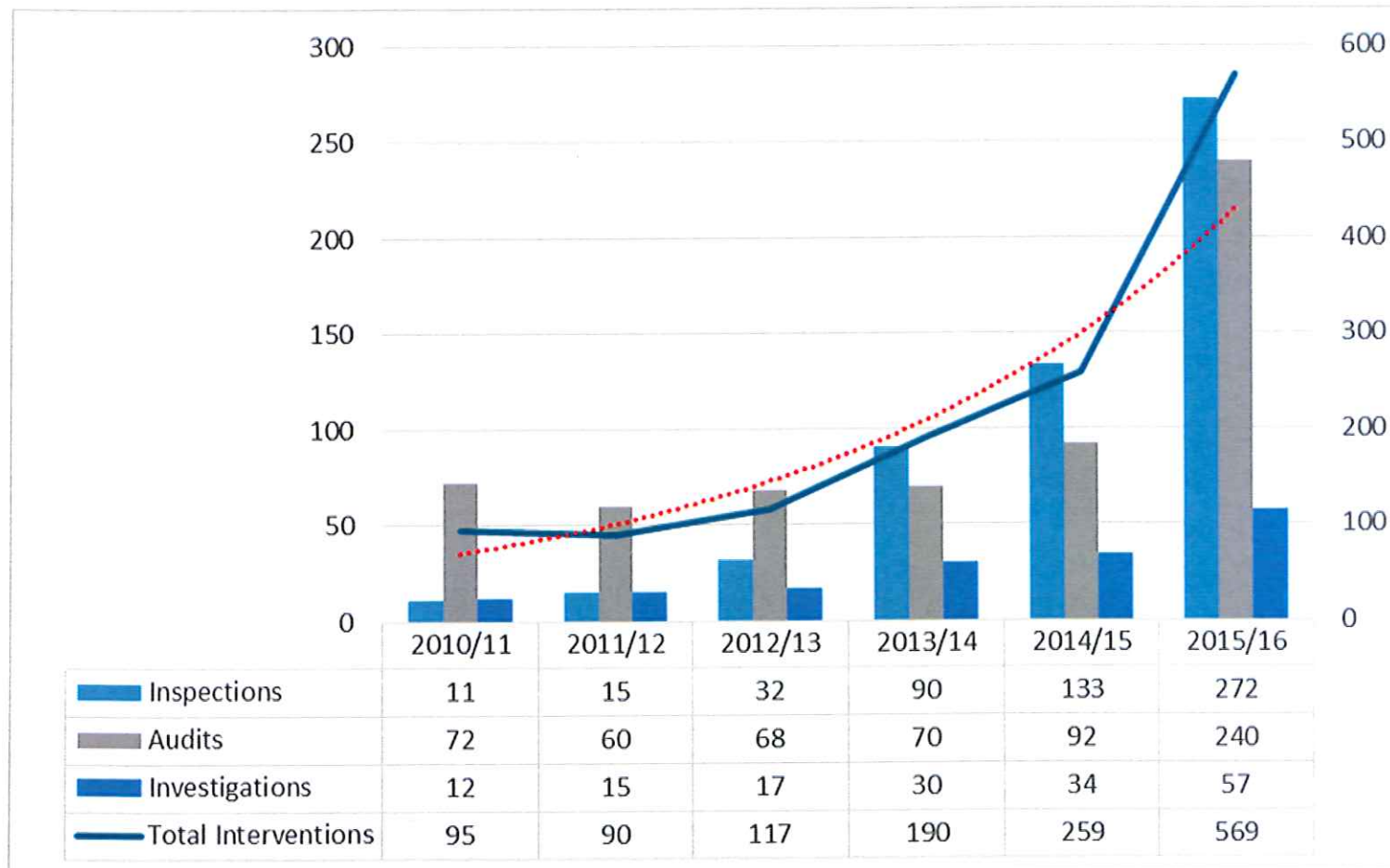
DESCRIPTION	COSTS [R Million]						
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Theft & Vandalism	7.6	6.8	15.1	9.6	9.6	17.5	22.1
Train Fires	43.5	72.8	64.6	126.2	116.7	94.6	79.3
Level Crossing Accidents	0.8	0.4	0.2	0.6	0.5	15.3	4.48
Collisions	3.5	21.9	24.4	61	30	2.5	4.9
Derailments	5.2	9.7	19.3	6.1	10.1	0.21	0.65
GRAND TOTAL	60.7	111.7	123.5	203.2	167.6	130.3	111.5

Table 8: PRASA Rail cost of operational occurrences and security-related incidents from 2009/10 to 2014/15 reporting period without inflation adjustment

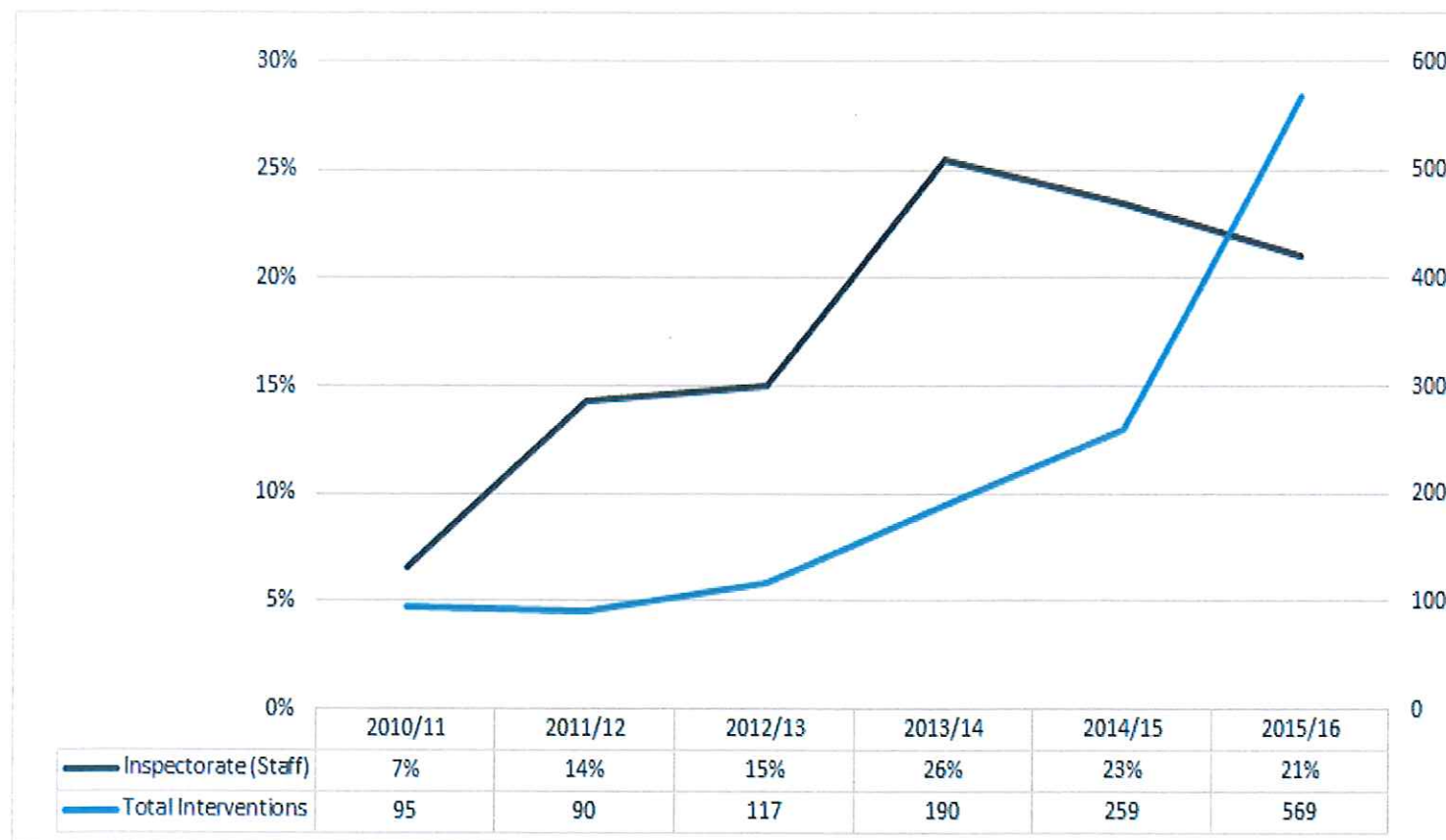
Note : as per State of Safety report for period 2014/15



COMPLIANCE AND RISK INTERVENTIONS

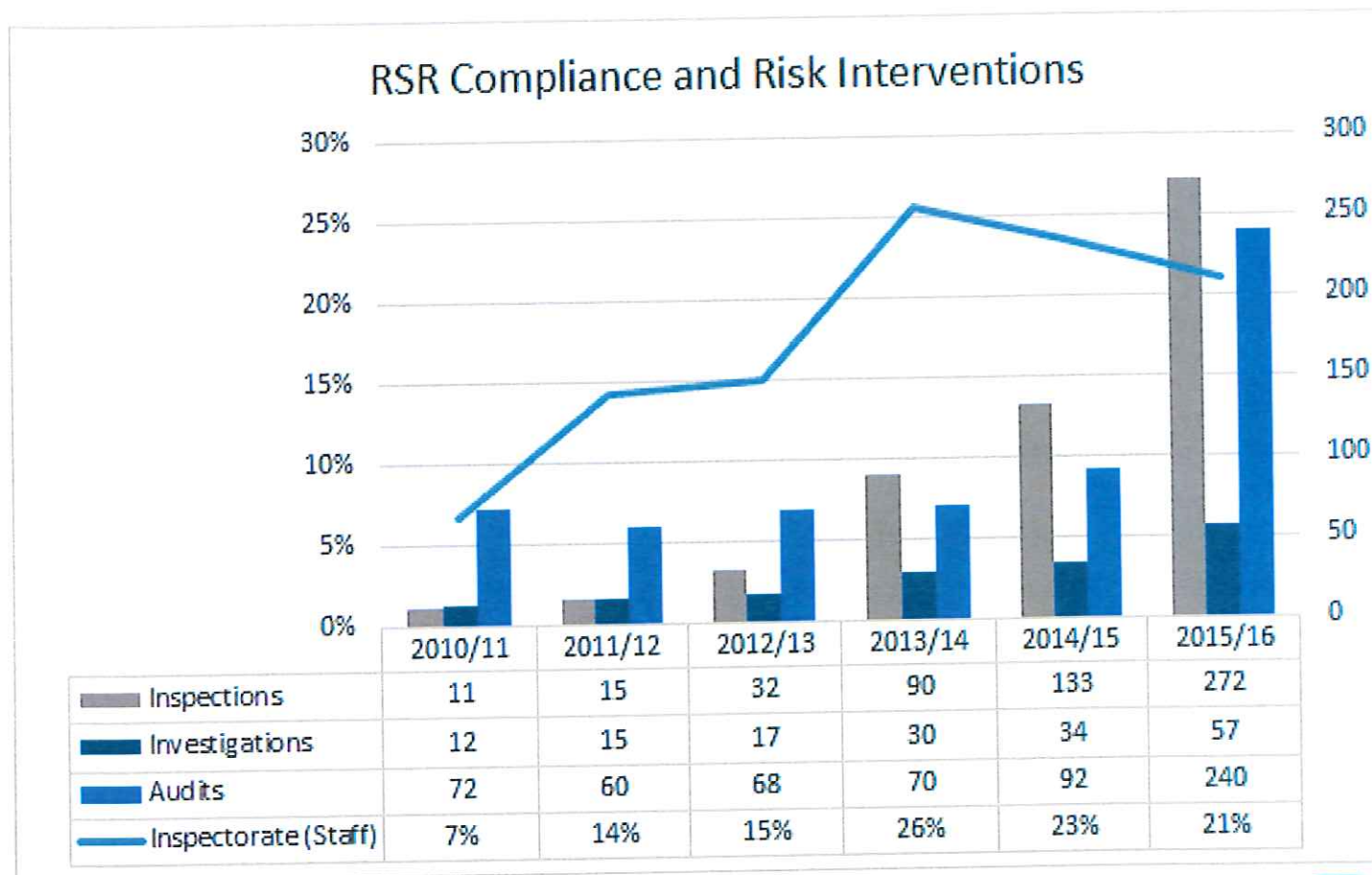


RSR INSPECTORATE vs. RSR INTERVENTIONS



Note : Inspectorate calculated as number of inspectors as % of total staff compliment

RSR INSPECTORATE vs. RSR INTERVENTIONS



Note : Inspectorate calculated as number of inspectors as % of total staff compliment