

GSI
18 August 2014

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TRANSNET



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Transnet Freight Rail – Grain Silo Industry Symposium

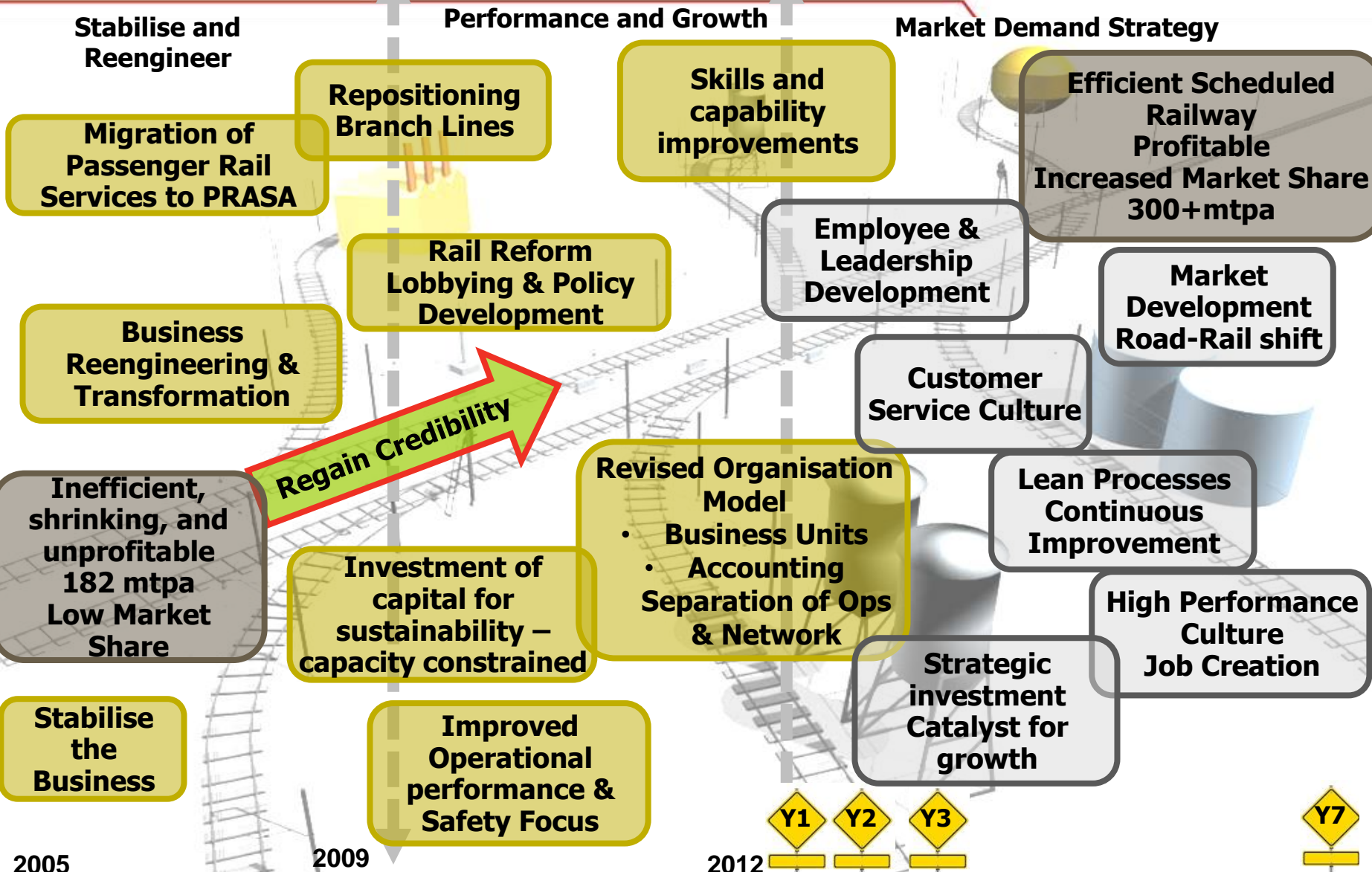




1. MDS Journey
2. Grain Industry Strategy
3. TFR Grain Industry Performance
4. Grain Investment Strategy
5. Conclusion



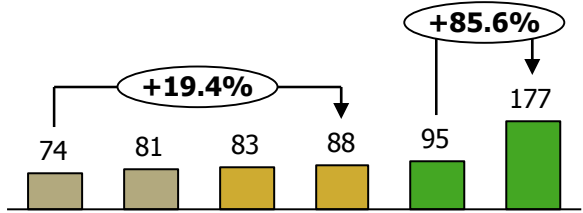
Rail Transformation is a Journey



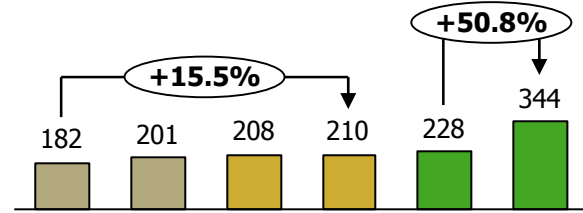
The MDS Journey



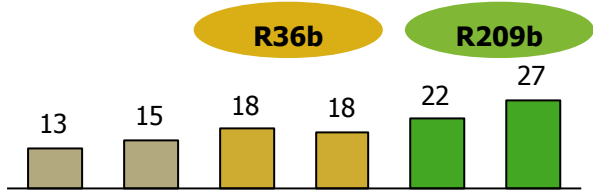
General Freight (million tons)



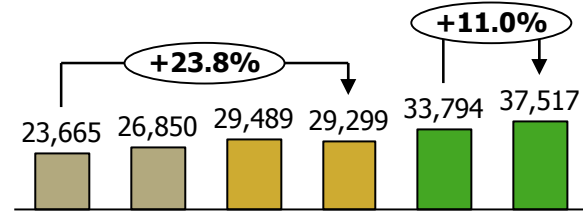
Freight Rail (million tons)



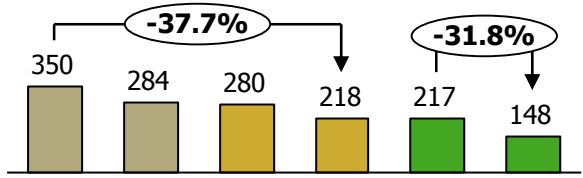
Capital Investment (Rb)



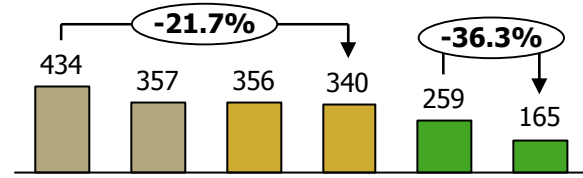
Employees



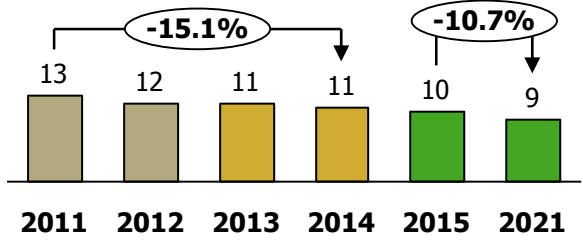
On Time Departures (Mins deviation)



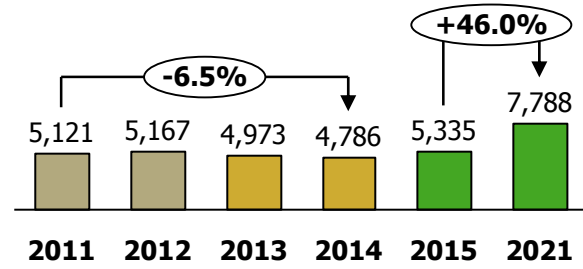
On Time Arrivals (Mins deviation)



Wagon Turnaround Time (Days)



Loco Efficiency (GTK/Loco/month)



Grain Industry Market Analysis



Industry Structure

- Farmers creating own storage – ***silo bags*** - reduces reliance on rail ex silo's
- Tonnages to migrate to Traders & Logistics providers – ***may present opportunities for industry collaboration***

Key Industry Developments

- Build 2mt export capability by investments throughout the SC -Loading, Off Loading and Rail Capacity
- Import capability creation
- ***Collaborate*** with Silo's to capture traffic from farm to silo's / domestic market
- ***Competitive rates*** as trucks target grain on return legs

Areas of Growth / Decline

Growth

- Deep sea imports & ***exports***
- Western Cape wheat to the inland
- Kimberley maize to the coast
- North West volume increase
- ***Branch Lines***
- Traffic on re-opened or upgraded branch lines



Long Term Strategy

- *Develop bigger hubs - Export & Import*
- **Flexible service** for export traffic
- *Export and Import value chain coordinators*
- **Ring-fence Capacity** to market segment
- **Less than train load consolidation**
- Joint **partnerships** with road hauliers to capture traffic from farm to silo's
- **Value chain integration** – *target outbound traffic*
- **Auctioning of capacity**
- **Innovative pricing models**



Grain Export Operating Model

Grain Export Programme				Frequency							Wagons Required
Period June – October 2014				No of wagons per day							
Forwarding Area	Destination Area	Tons per day	Tons per week	Sun	Mon	Tue	Wed	Thur	Fri	Sat	
Bethlehem	Island View	2200	15 400	50	50	50	50	50	50	50	350
Bethlehem	Maydonwharf	2200	15 400	50	50	50	50	50	50	50	350
Bethlehem	Maydonwharf	1408	9 856	32	32	32	32	32	32	32	224
	Total		40 656	132	132	132	132	132	132	132	924



Grain Domestic Operating Model

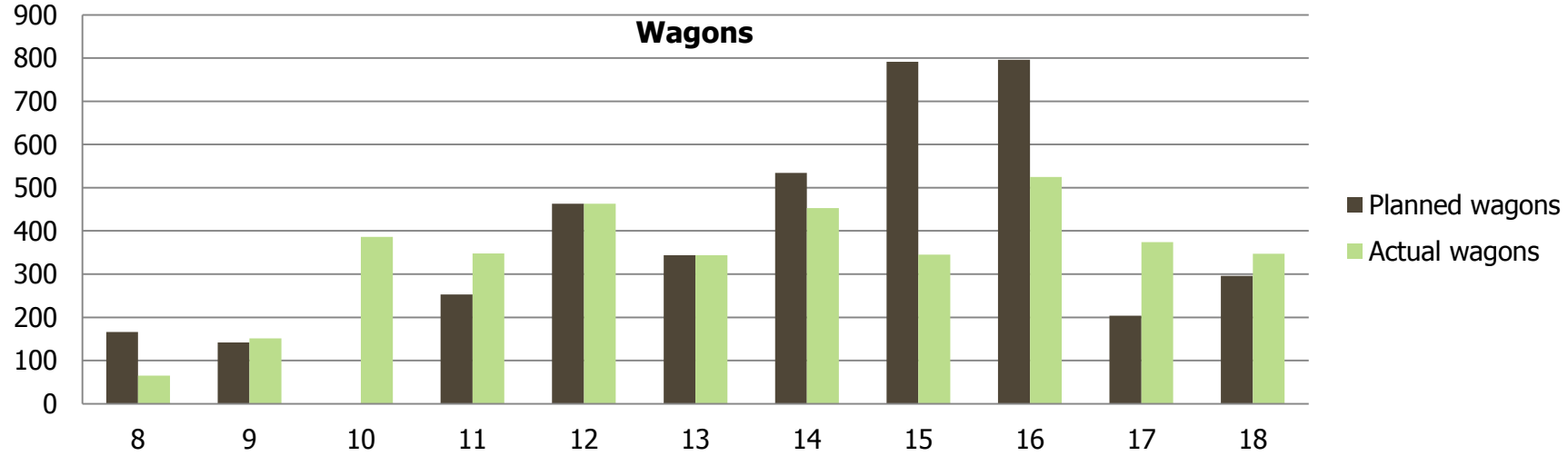
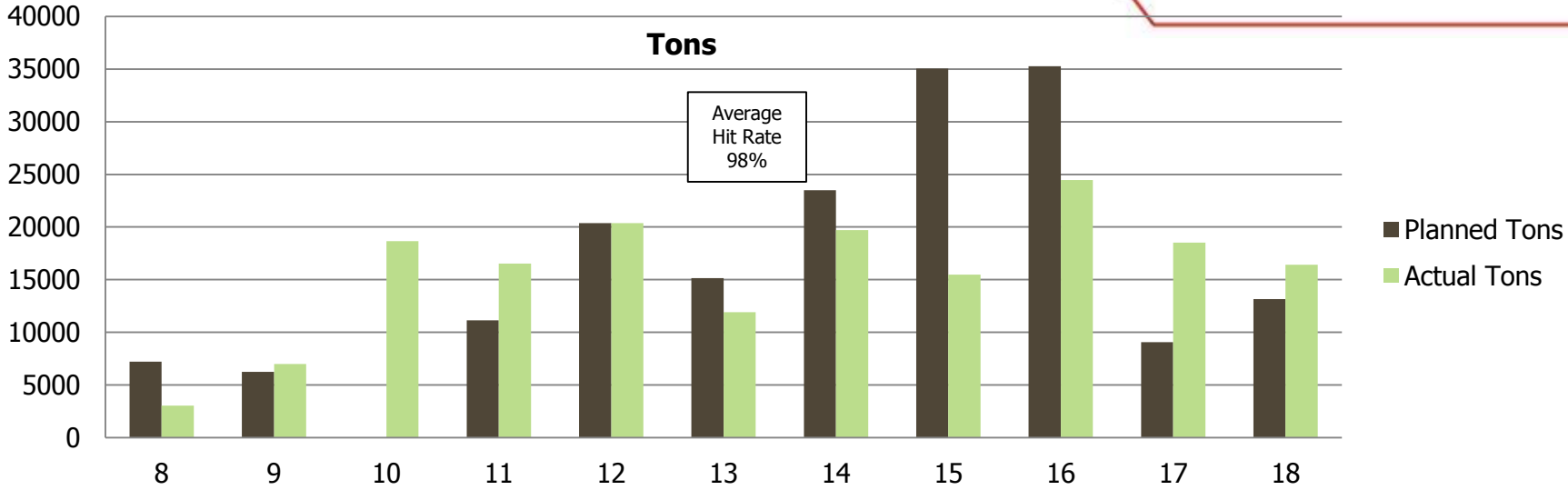
FWD Area	Dest Area	Frequency							Wagons Required
		No of wagons per day							
		Sun	Mon	Tues	Wed	Thurs	Fri	Sat	
Bethlehem	PMB		20	20	20	20	20		100
Kroonstad	Estcourt		15	15	15	15	15		75
	Polokwane		10	10	10	10	10		50
	Robinson		20	20	20	20	20		100
	Port Elizabeth		10	10	10	10	10		50
Kimberley	Bellville		32		32		32		96
	Bellville Tongaat			25		25			50
	Worcester		32				32		64
	Pretoria			32		32			64
	Vereeniging		32		32		32		96
Klerksdorp	Randfontein		15	15	15	15	15		75
De-Aar	Bellville		32		32		32		96
	Leeuhof			32		32			64
	Total Tons		9592	7876	8184	7876	9592		980



Grain Imports Operating Model

FWD Area	Dest Area	Frequency					Wagons Required
		No. of wagons per day					
		Mon	Tues	Wed	Thurs	Fri	
Durban	Pretoria	40	40	40	40	40	200
	Vic	25	25	25	25	25	125
	Henneman	15	15	15	15	15	75
	Total Tons	4268	4268	4268	4268	4268	400
FWD Area	Dest Area	Frequency					Wagon Requirement
		Mon	Tues	Wed	Thurs	Fri	
		Mon	Tues	Wed	Thurs	Fri	
Bellville	Sasko Malmesbury	60		60		30	150
	Sasko Paarl		60		60	30	150
	Total Tons	2400	2400	2400	2400	2400	300

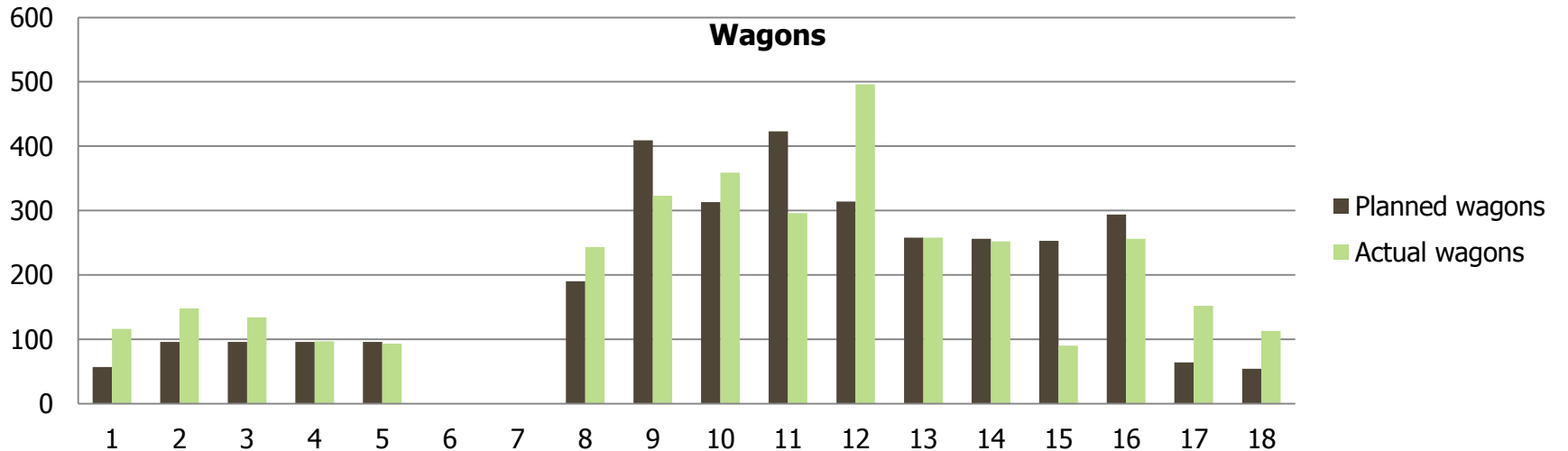
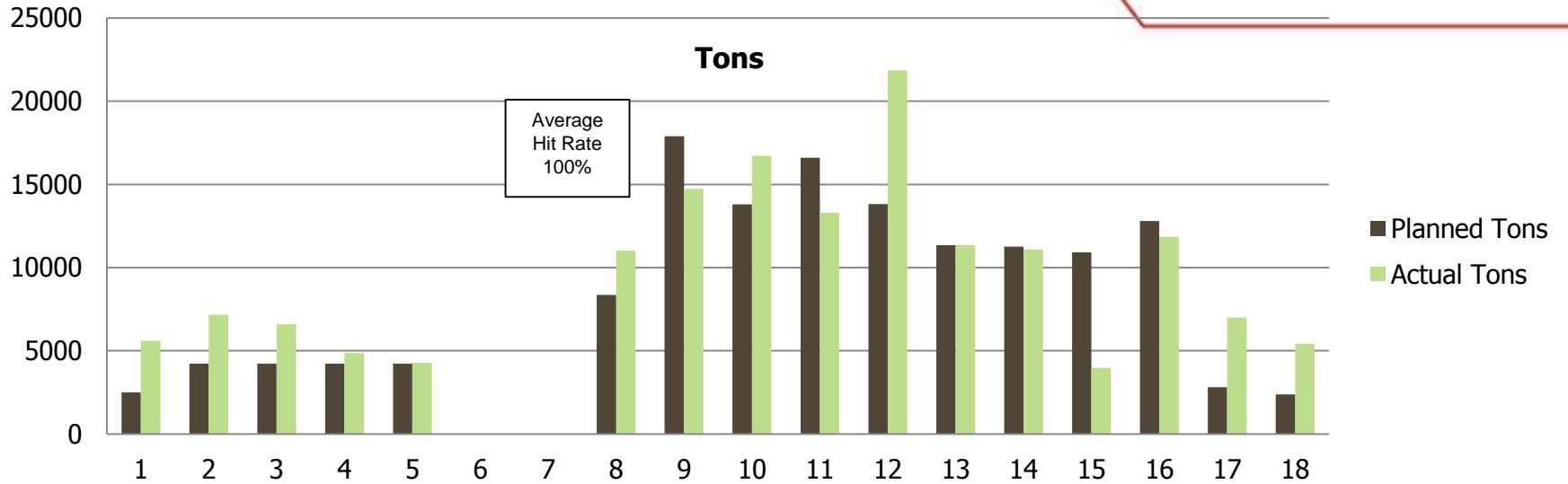
Grain Exports: Car Loadings





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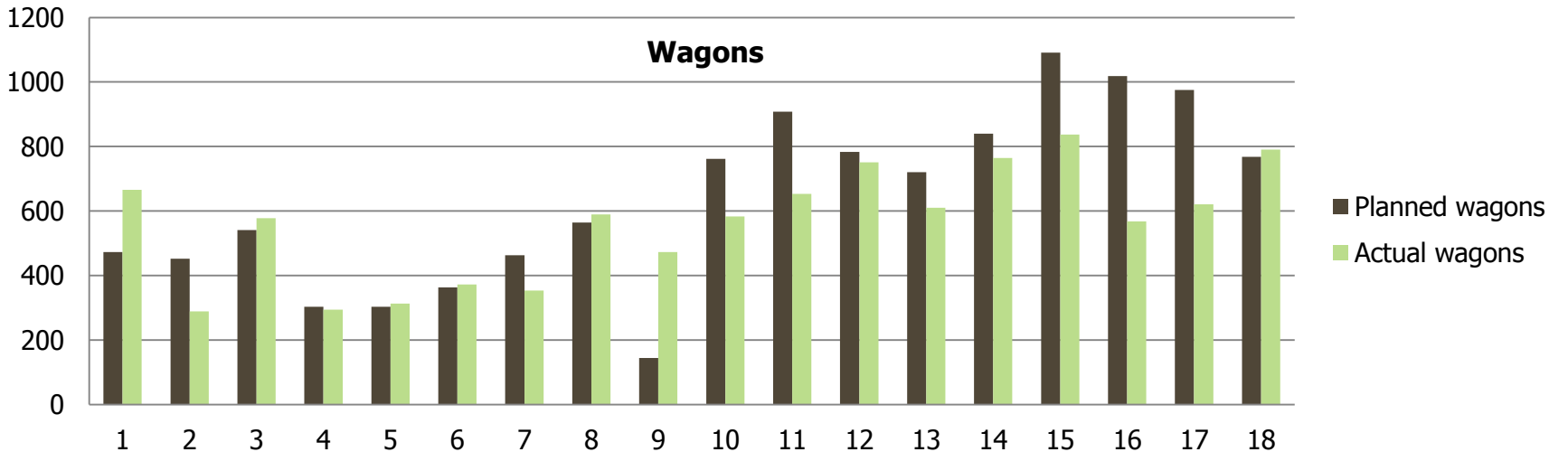
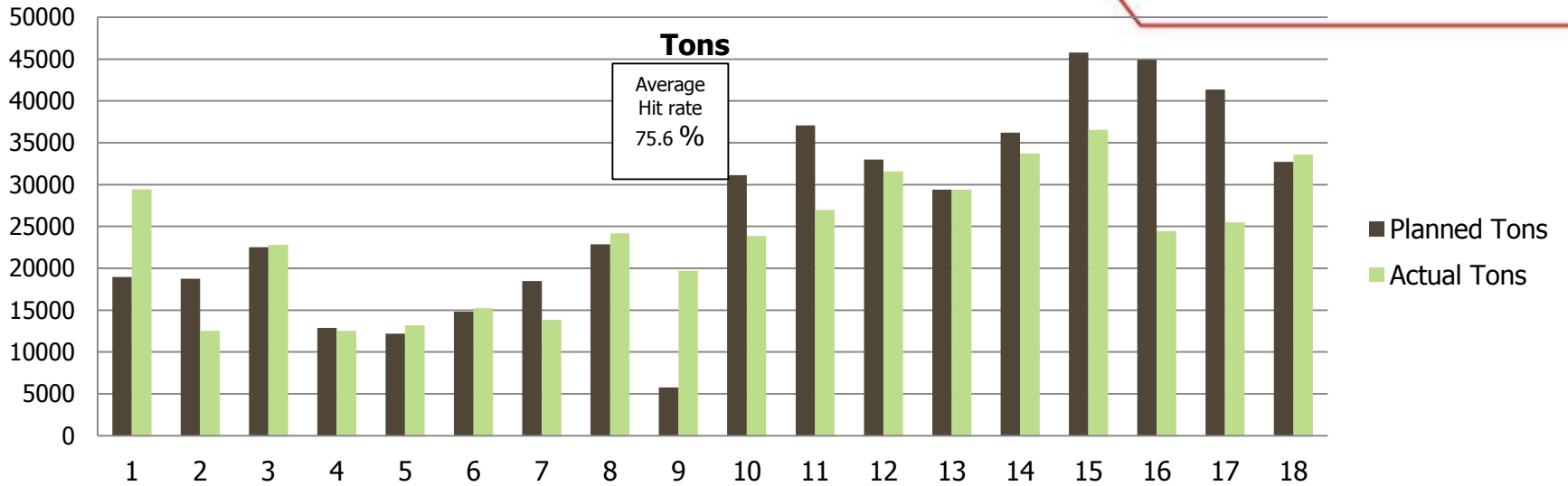
Grain Imports: Car Loadings



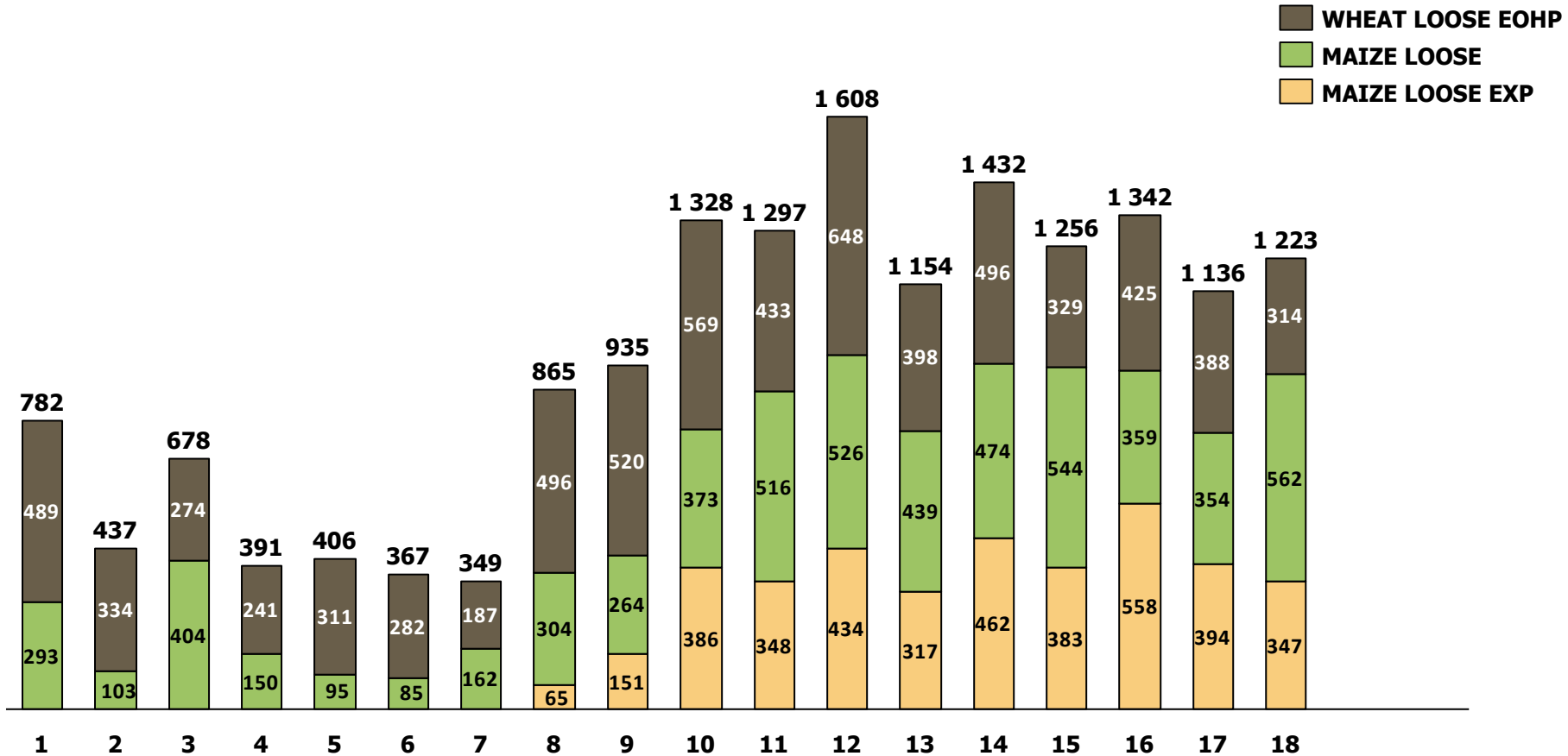


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Grain Domestic: Car Loadings



Car Loadings per Product





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Car Loadings - Key Forwarding & Receiving areas

Key Forwarding Areas	Wk. 1	Wk. 2	Wk. 3	Wk. 4	Wk. 5	Wk. 6	Wk. 7	Wk. 8	Wk. 9	Wk. 10	Wk. 11	Wk. 12	Wk. 13	Wk. 14	Wk. 15	Wk. 16	Wk. 17	Wk. 18	% contribution per area
Bethlehem	62	10		23	10	20	40	143	170	396	373	439	359	503	353	501	374	347	27%
Kimberley	174	55	139	64	147	185	148	316	252	274	228	294	188	176	244	151	261	256	21%
Kroonstad			9	15	18	37	52	63	64	136	215	203	227	236	219	225	161	332	15%
Durban + Durban harbour	116	148	134	97	93			243	323	359	296	448	271	280	132	237	153	113	21%
De Aar	145	110	8	74	83	84	27	49	48	43	84	156	71	76	163	72	29	40	7%
Bellville	190	15	307	17			4		32	41		7	7	22		11	15	8	1%
Total	687	338	597	290	351	326	271	814	889	1 249	1 196	1 547	1 123	1 293	1 111	1 197	993	1 096	

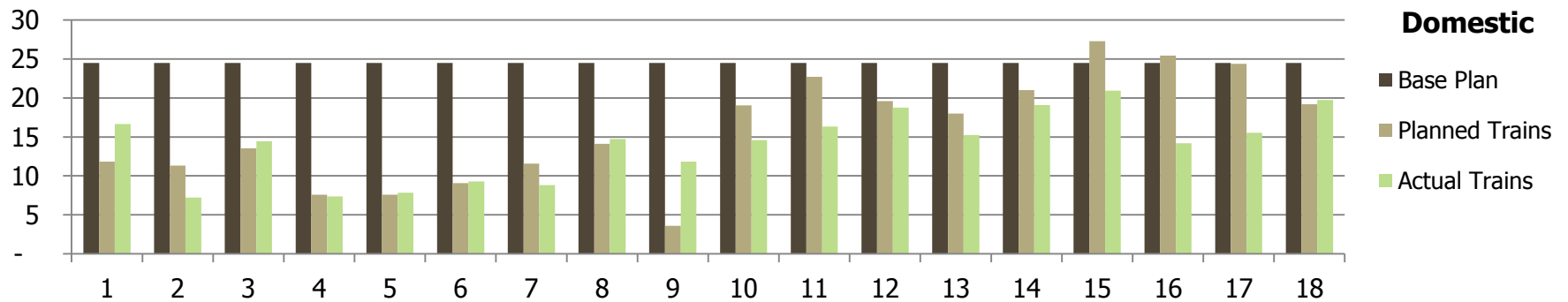
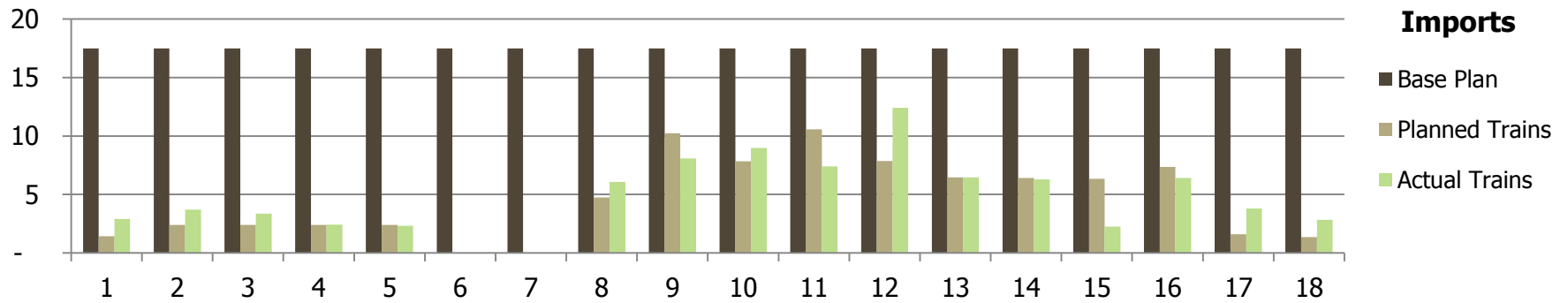
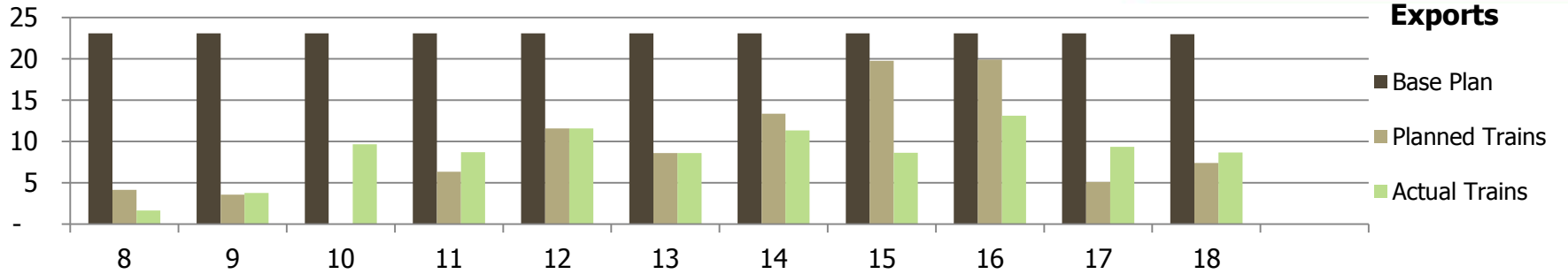
Key Receiving areas	Wk. 1	Wk. 2	Wk. 3	Wk. 4	Wk. 5	Wk. 6	Wk. 7	Wk. 8	Wk. 9	Wk. 10	Wk. 11	Wk. 12	Wk. 13	Wk. 14	Wk. 15	Wk. 16	Wk. 17	Wk. 18	% contribution per area	
Durban + Durban Harbour	-	-	-	-	-	-	-	65	151	386	349	434	320	462	384	561	391	347	24%	
Pretoria	237	95	48	10	20		13	198	150	366	174	287	146	253	129	155	42	159	16%	
Bellville	187	42	262	42	38	29	27	158	93	107	50	209	161	102	257	111	99	273	14%	
Pietermaritzburg	84	158	134	97	93			79	103	8	103	116	42	79	64	110	92		9%	
Kimberley	32	33	63	32	64	64	92	122	64	98	96	94	83	110	91	29	93	84	8%	
Vereeniging	30			67	129	92	48	10		25	78	99	138	75	23	34	81	19	6%	
Port Elizabeth	49	24	36	59	26	37	30	60	74	74	46	6	93	73	57	37	66	42	6%	
Bloemfontein	33		7	6	-	76	83	24	3	54	52	36		97	54	56	64	108	5%	
Polokwane	18	1								31	35	88	84	113	74	35	85	84	47	4%
East London	36	15	32	31	22	15	56	3	27	21	64	41	30	75	50		17	60	4%	
Total	706	368	582	344	392	313	349	719	696	1 174	1 100	1 406	1 126	1 400	1 144	1 178	1 029	1 139		

- Major forwarding areas are Bethlehem, Kimberley, Kroonstad & Durban
- Major Receiving areas are Durban, Pretoria, Bellville

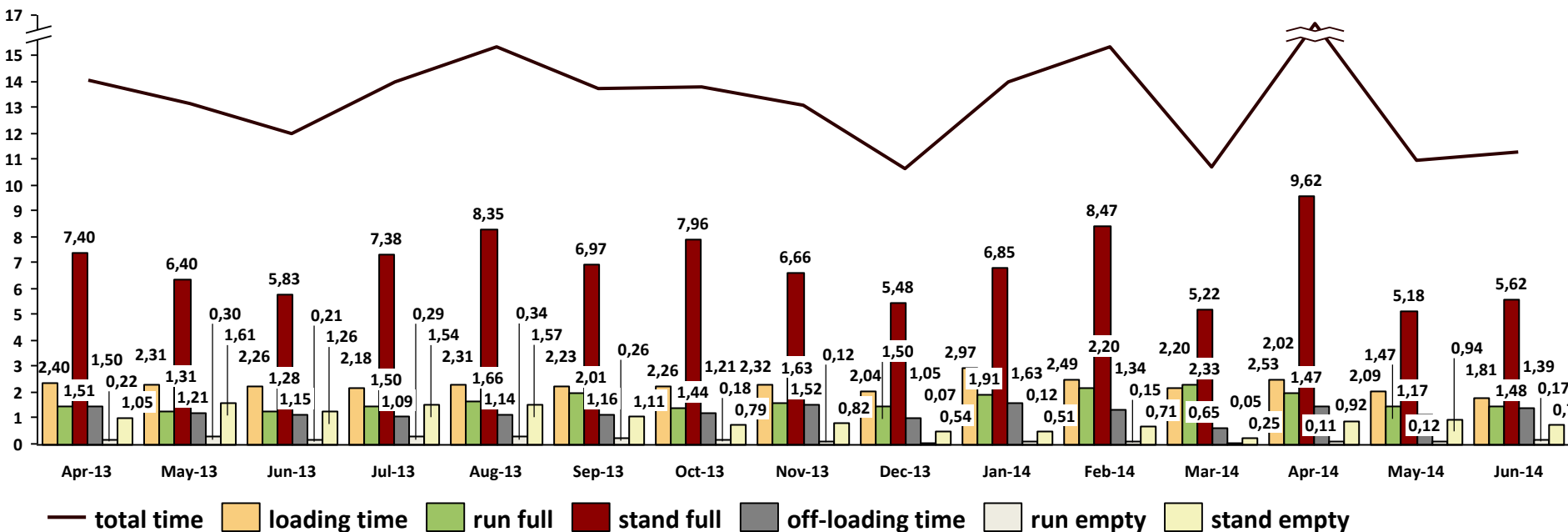


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Grain Sets Transported



Cycle times of Maize and Wheat wagons

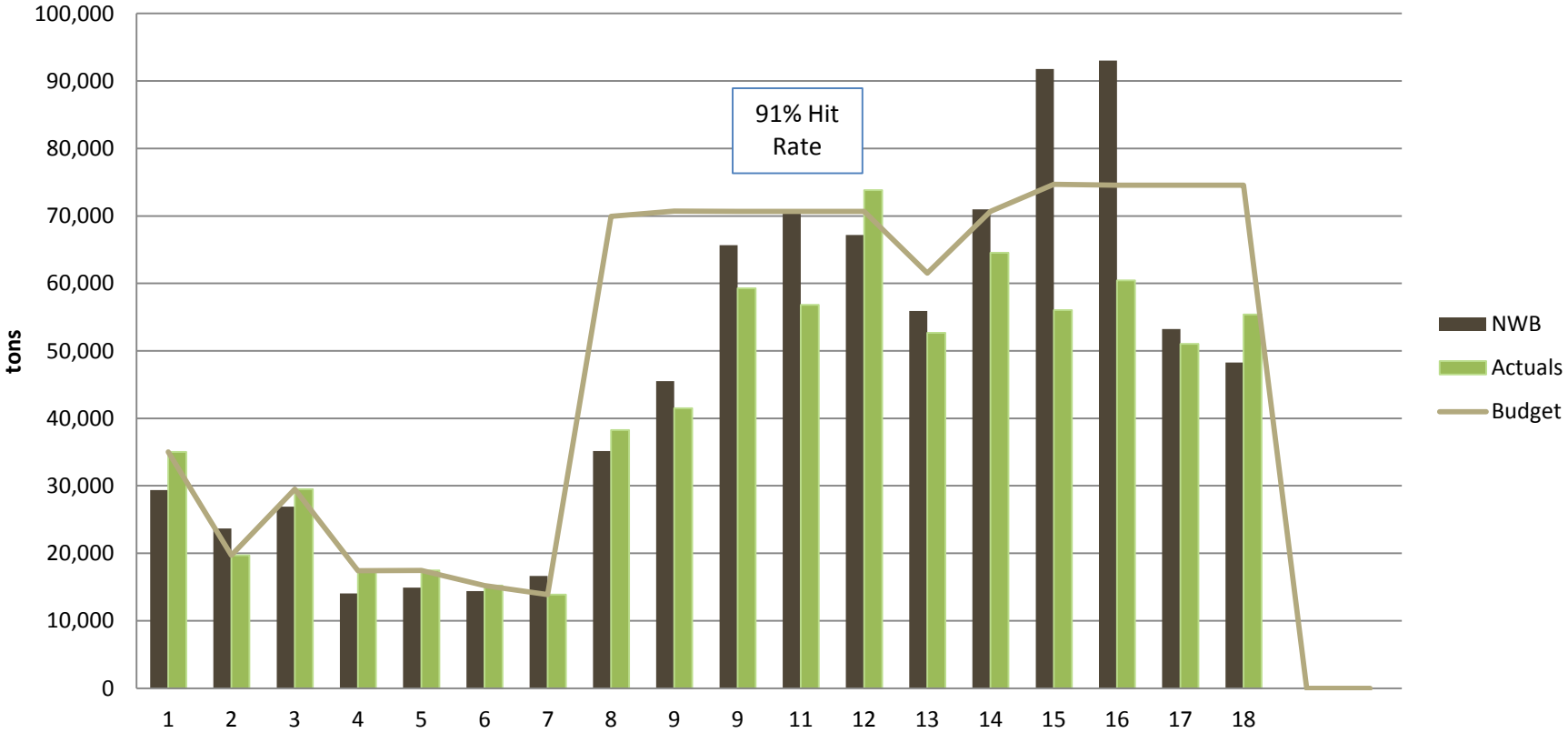


No of Days	FY 2013/14				FY 2014/15
	Q1 Average	Q2 Average	Q3 Average	Q4 Average	Q1 Average
Total time	13.1	14.4	12.5	13.4	13.0
Loading time T1	2.3	2.2	2.2	2.6	2.1
Run full T2	1.4	1.7	1.5	2.1	1.7
Stand full T2	6.5	7.6	6.7	6.8	6.8
Off-loading time T3	1.3	1.1	1.3	1.2	1.4
Run empty T4	0.2	0.3	0.1	0.1	0.1
Stand empty T5	1.3	1.4	0.7	0.5	0.9

Grain: Total Performance



Grain



Wagons: Grain Sector

Deployment aligned to Strategic Hubs

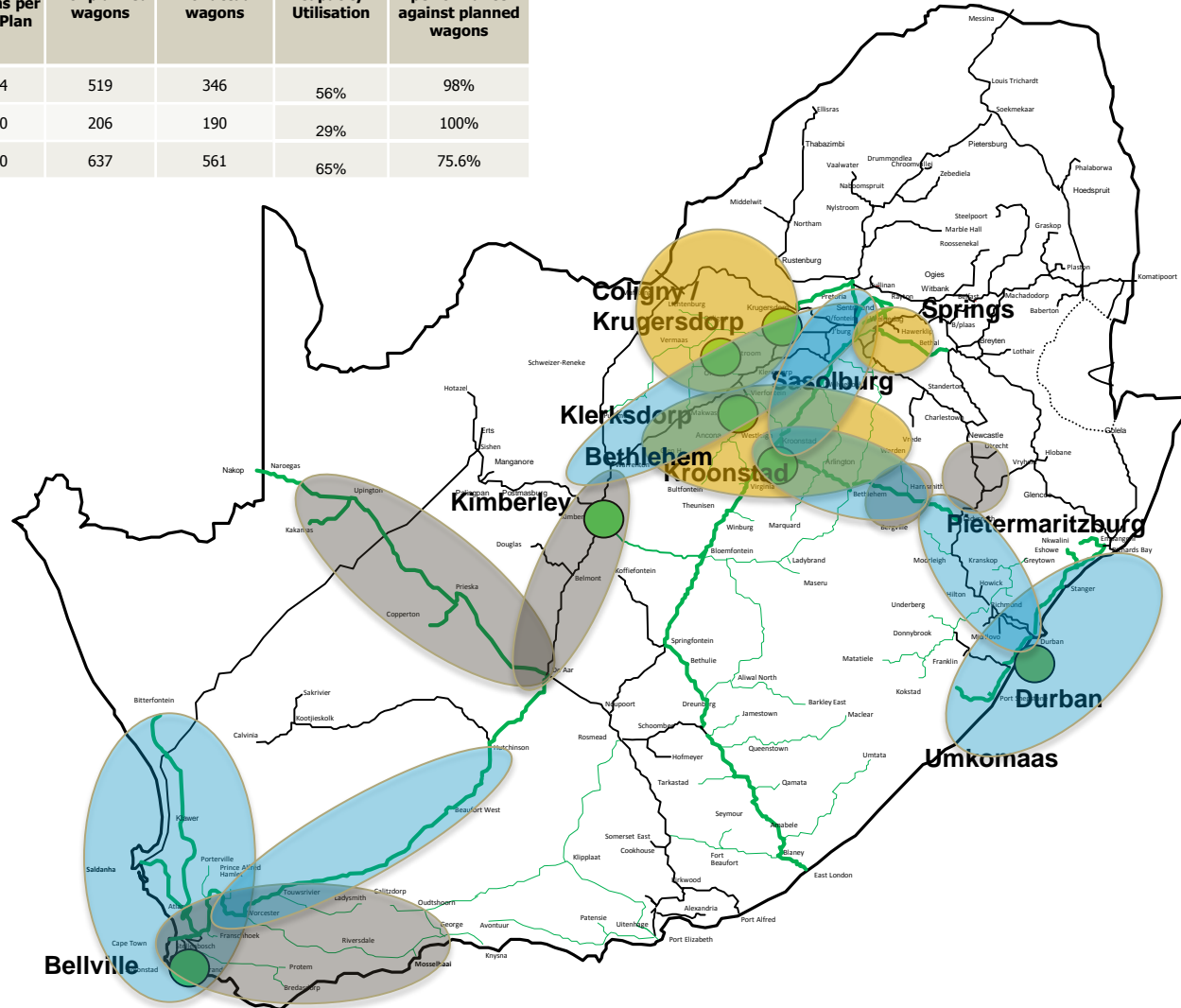


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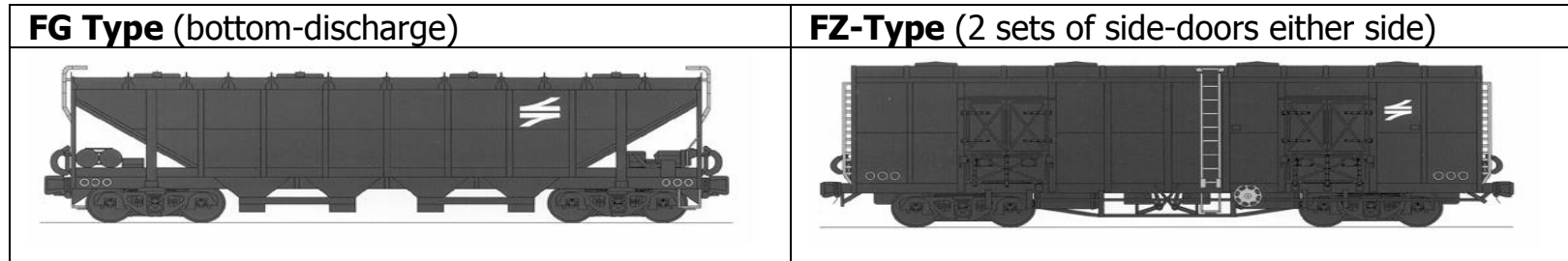
Grain	Tonnage per Base Plan	Planned Tonnage	Actual Tonnage	# of Wagons per Base Plan	# of planned wagons	# of actual wagons	Capacity Utilisation	Actual performance against planned wagons
		Average	Average					
Exports	40,656 pw	16,016 pw	15,467 pw	924	519	346	56%	98%
Imports	33,340 pw	7,857 pw	8,715 pw	700	206	190	29%	100%
Domestic	43 120 pw	26,606 pw	23,848 pw	980	637	561	65%	75.6%

- Domestic
- Exports
- Imports

Grain



Rolling-stock for Grain Industry: Estimated Annual Maintenance Costs per Fleet (Rm)



- There are two wagon types mainly used in the grain industry, namely, the FZ and FG wagon types, with air-brake and vacuum-brake variants of each
- The air-brake variants allow for longer-train consists of 50 or more wagons and the vacuum-brake wagons have a train length limit of 40 wagons
- Both wagon-types have closed tops to protect the contents
- The net permissible load in either of these wagon types is 44 ton
- No new builds over MDS period – **only maintenance and major lifting costs per annum**

Wagon Type	MDS_Yr1	MDS_Yr2	MDS_Yr3	MDS_Yr4	MDS_Yr5	MDS_Yr6	MDS_Yr7	7-YEAR TOTAL
FG	26.60	28.29	29.99	31.79	33.70	35.72	37.86	223.96
FZ	55.39	58.92	62.46	66.20	70.18	74.39	78.85	466.39
TOTAL	81.98	87.22	92.45	98.00	103.88	110.11	116.72	690.35

Key Locomotive Workhorses: 34D, 35D, 37D & 18E

Deployment aligned to Strategic Hubs + Annual Estimated Costs by Locomotive Class



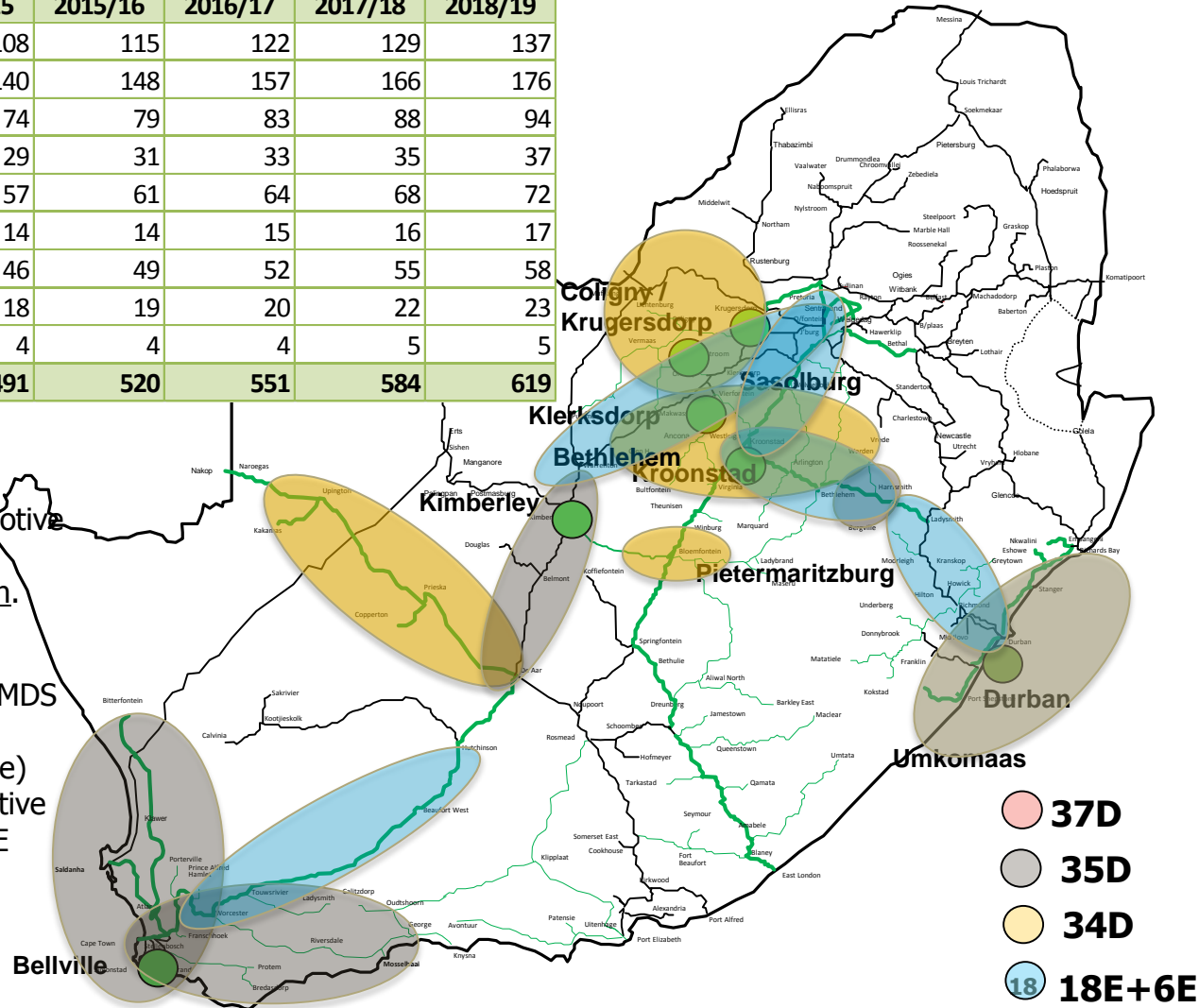
LOCOMOTIVE CLASS	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
18E	96	102	108	115	122	129	137
34D	123	131	140	148	157	166	176
35D	66	70	74	79	83	88	94
36D	26	28	29	31	33	35	37
37D	51	54	57	61	64	68	72
38D	12	13	14	14	15	16	17
6E	41	43	46	49	52	55	58
7E	16	17	18	19	20	22	23
8E	3	4	4	4	4	5	5
Grand Total	433	461	491	520	551	584	619

Current Conversion Programme:

- For Electrical Locomotives:
 - 6E locomotive to 18E Locomotive
- End date: FY 2015
- Estimated Programme Cost: R1.5bn.

NB: 20E locomotives (~R5bn) to be deployed on certain 18E routes later in MDS horizon; for e.g.:

- Cape Corridor (JHB to Bellville) to eliminate en route locomotive changes between 18E and 7E locomotives



Grain

37D

35D

34D

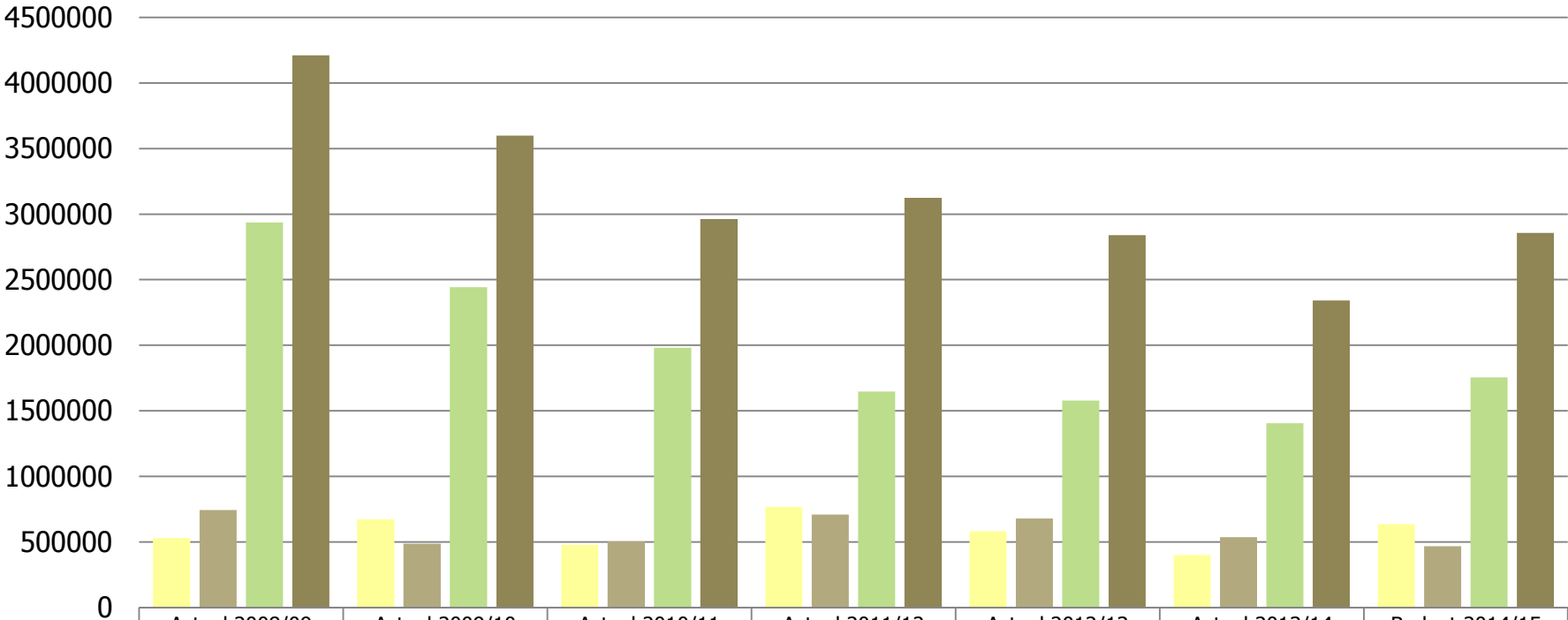
18E+6E

Branch Lines Priority Maintenance for 2014/15

Infra Depot	Branch Line	Copex RM	Opex RM
Bellville	Wolsely – Prince Alfred – Hamlet	21.0	0.5
	Caledon - Bredasdorp	12.3	7.0
	Hermon – Porterville	7.2	2.5
Bloemfontein	Orkney – Vierfontein	5.0	4.0
	Harrismith – Warden	10.0	1.2
East London	Amabele – Umtata	9.7	6.4
	Blaney- Cookhouse	43.0	3.0
Port Elizabeth	Klipplaat – Rosmead	33.0	5.0
Kimberley South	Belmont – Douglas	6.4	2.0
Durban	Pietermaritzburg	15.2	25.3
Ladysmith	Ennersdale - Bergville	20.0	17.5
Krugerdpord	Klerksdorp – Ottosdal	6.5	8.5
	Makwassie – Vermaas		
	Coligny – Pudumoe		
Total		189.3	82.9

**Total R272.2m
Priority maintenance
required to maintain
Safety Standards**

Grain Volumes Performance Breakdown



	Actual 2008/09	Actual 2009/10	Actual 2010/11	Actual 2011/12	Actual 2012/13	Actual 2013/14	Budget 2014/15
Export	529655	671040	478925	766778	582375	400074	635235
Import	743551	486337	503151	709665	678256	536398	467384
Domestic	2937014	2441696	1980719	1647572	1578664	1405447	1753702
Total	4210220	3599073	2962795	3124015	2839295	2341919	2856321

Preparing for Growth



Grain Industry Joint Initiative

Grain Industry Collaboration

- Objective to improve strike rate from 67% to 100% in 2014 export season
 - Industry visibility of volumes, ship schedules, loading points amongst Grain Silo's, Ports, Agri Port and TFR
 - Introduction of export value chain coordinator
 - Review rules of the game in terms of performance measures, capacity, allocation of capacity, loading and off loading norms, penalties and reward across the supply chain
- Revisit competitive pricing approach for return leg cargo
- Review pricing model:
 - to incentivise customers to work weekends
 - Auction capacity via reservation approach to b and increase asset utilisation





Requirements from Industry

- *Utilise the capacity* allocated in agreed time
- Move towards a *7 day + 24 hour operations* to maximise all capacity available
- Start exploring to *consolidate movements at bigger silos*
- *Investing in rail infrastructure* at these silo's
- Grain industry to *coordinate activities* to optimise available capacity on rail
- *Firmed up orders* between agents and millers
- *Declaration of stock availability* a week in advance
- *No pre-loading* of cargo



Thank you

