



INTERNATIONAL
Railway Safety
Council Conference
AUSTRALIA 2019



How real is your assurance picture?

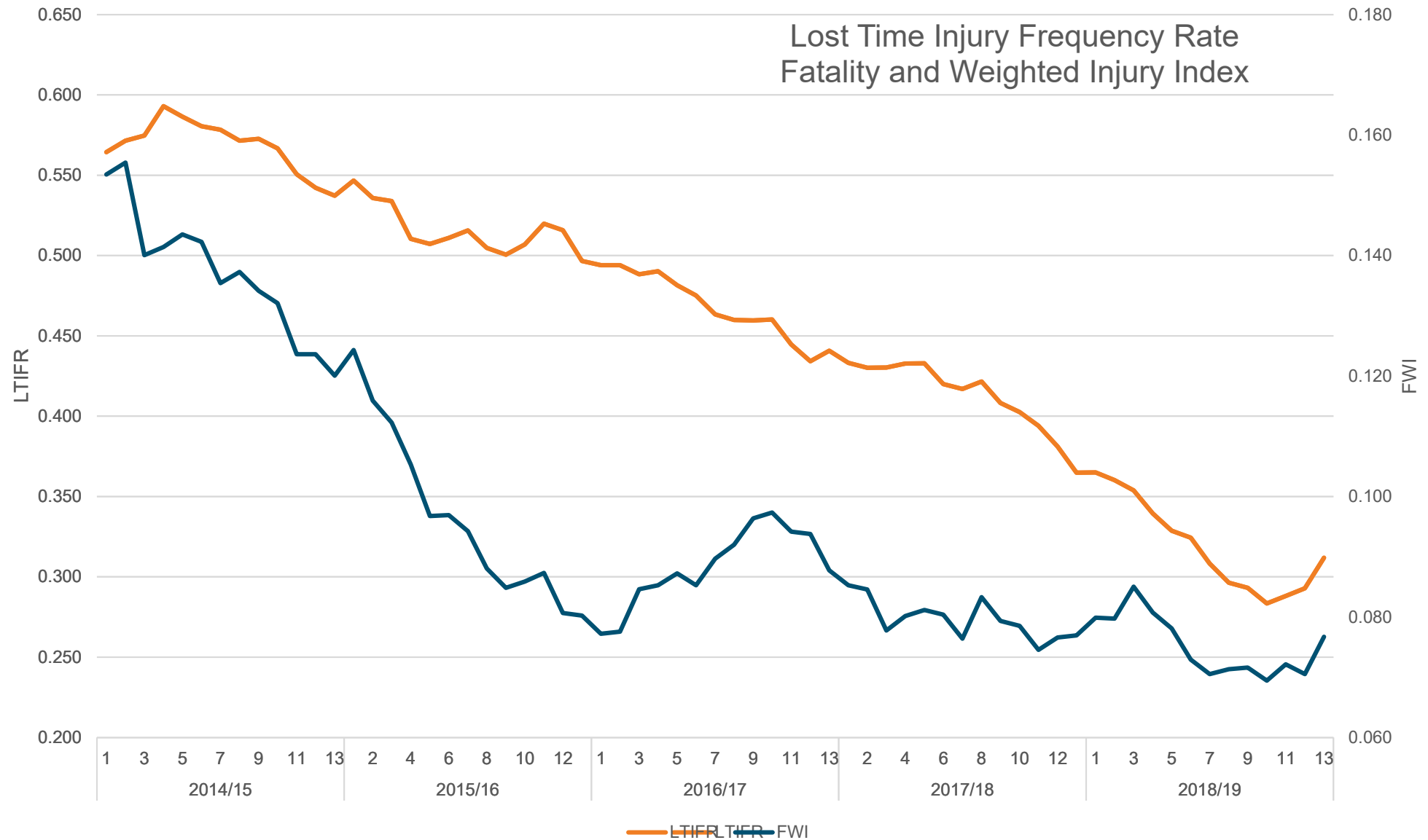
Allan Spence

Company scorecard in March 2019

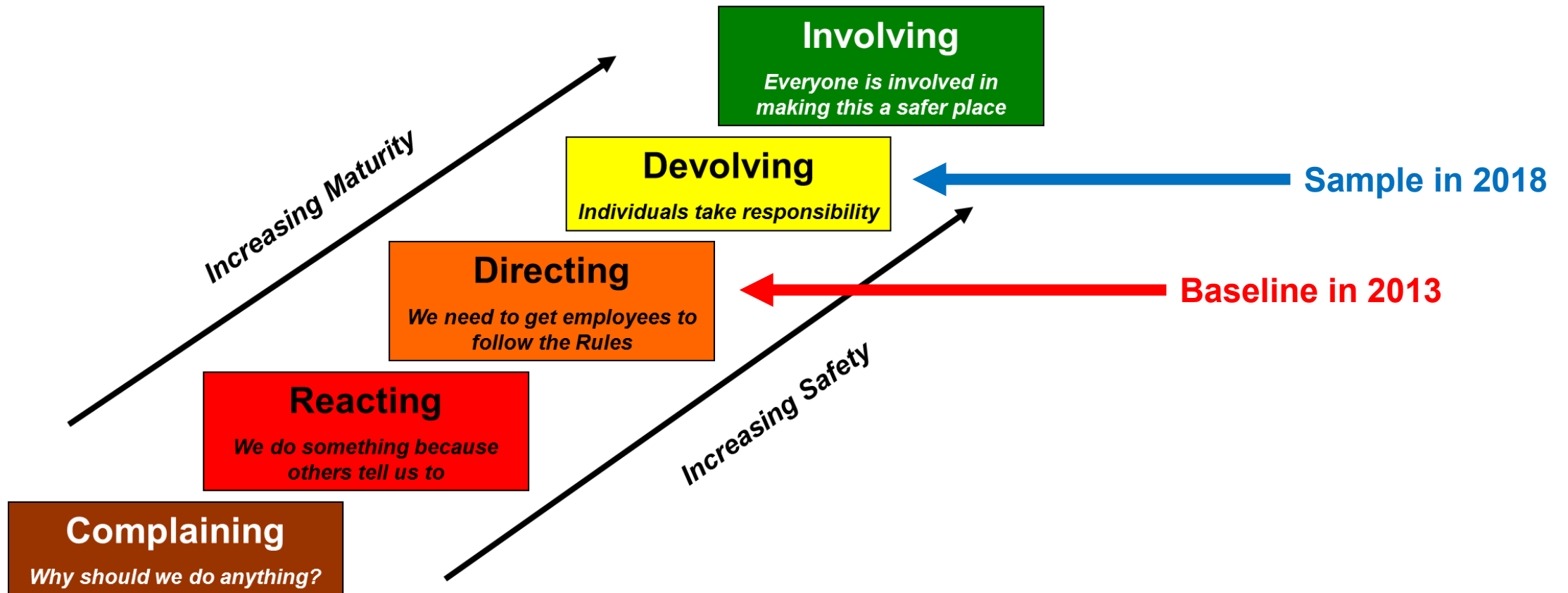
General	Current Period	Year-to-Date	Same Period Last Year		FULL YEAR FORECAST			
					WORSE	TARGET	BETTER	
Number of Workforce Safety HiPos	1	29	4		32	29	27	22
Fatalities	0	2	0	2	1	0		0
Specified Injuries	11	68	3		77	68	67	59
Lost Time Injuries	64	494	33		610	580		552
LTIFR (Rolling 13 Periods)	0.310	0.310	0.364		0.344	0.328		0.312
Road Traffic Offences (NIPs received as of period end)	9	245	21		286	260	245	234
Number of Close Calls Raised	28,626	277,526	26,448		153,750	205,000		256,250
% of Close Calls Closed within 90 days	89%	89%	89%		80%	85%	89%	90%
Train & Station Safety	Current Period	Year-to-Date	Same Period Last Year		FULL YEAR FORECAST			
					WORSE	TARGET	BETTER	
Number of Train Accident Risk HiPos	4	17	2		32	27		22
Passenger Train Accident Risk Reduction Measures	92%				60%	80%	92%	100%
Station Accidents (RIDDOR Reportable)	1	33	10		40	35	33	30
Public Safety	Current Period	Year-to-Date	Same Period Last Year		FULL YEAR FORECAST			
					WORSE	TARGET	BETTER	
Public Accidental Fatalities (excluding Level Crossings)	4	25	3		33	30		25
Suicides* *this figure is currently under review	30	251	12		254	251	241	231
Level Crossing Risk Reduction Benefits since CP4 exit (2017/18 Period 13)	2.823		2.258		2.840	3.086	3.155	3.471



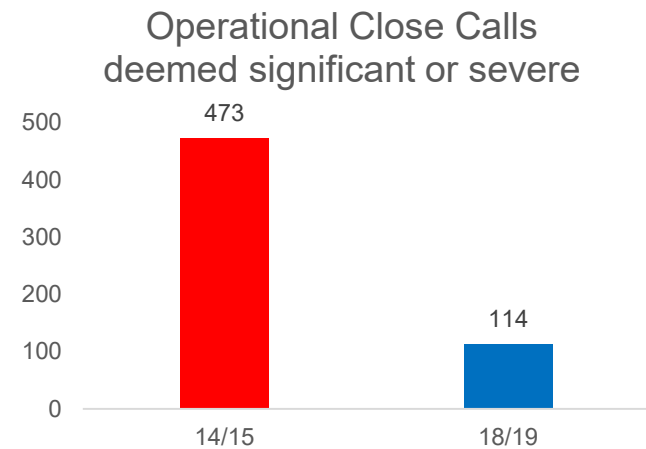
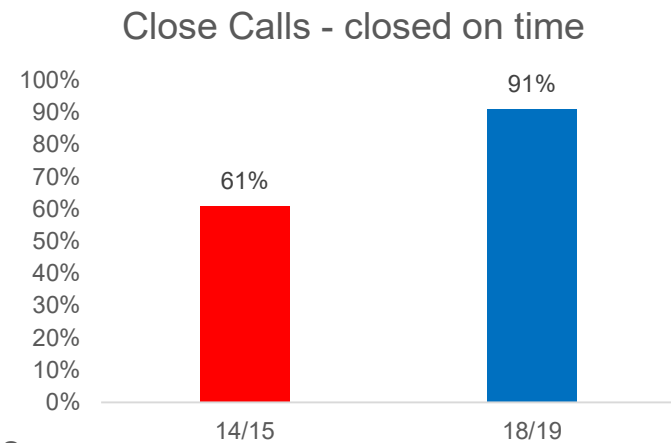
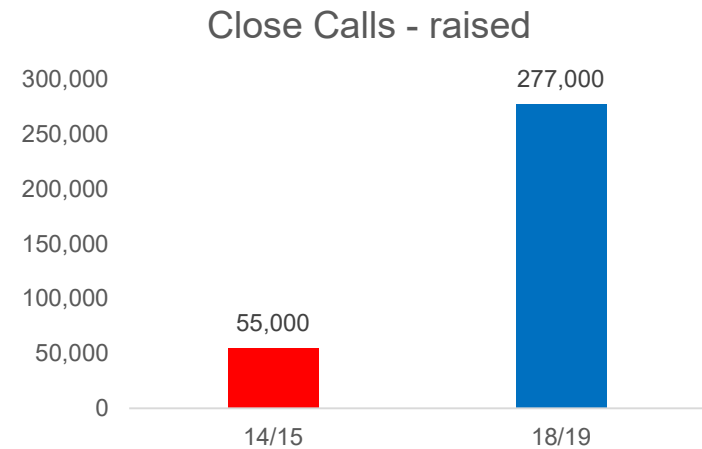
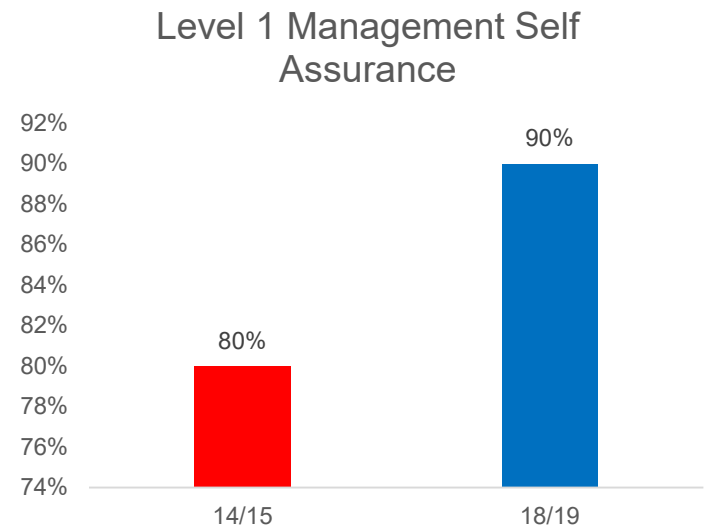
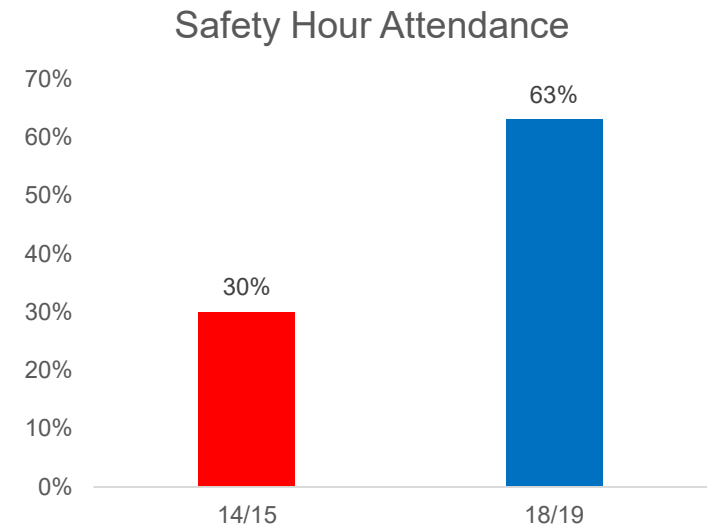
Workforce injury rates



Safety culture maturity



Performance metrics



On 3 July 2019, at 09:52 the driver of a Great Western Railway train from Swansea to London Paddington reported that the train had struck three track staff on the Up Main line at Margam East Junction on the South Wales Main Line.

Gareth Delbridge, 64 and Michael (Spike) Lewis, 58 were struck and fatally injured.



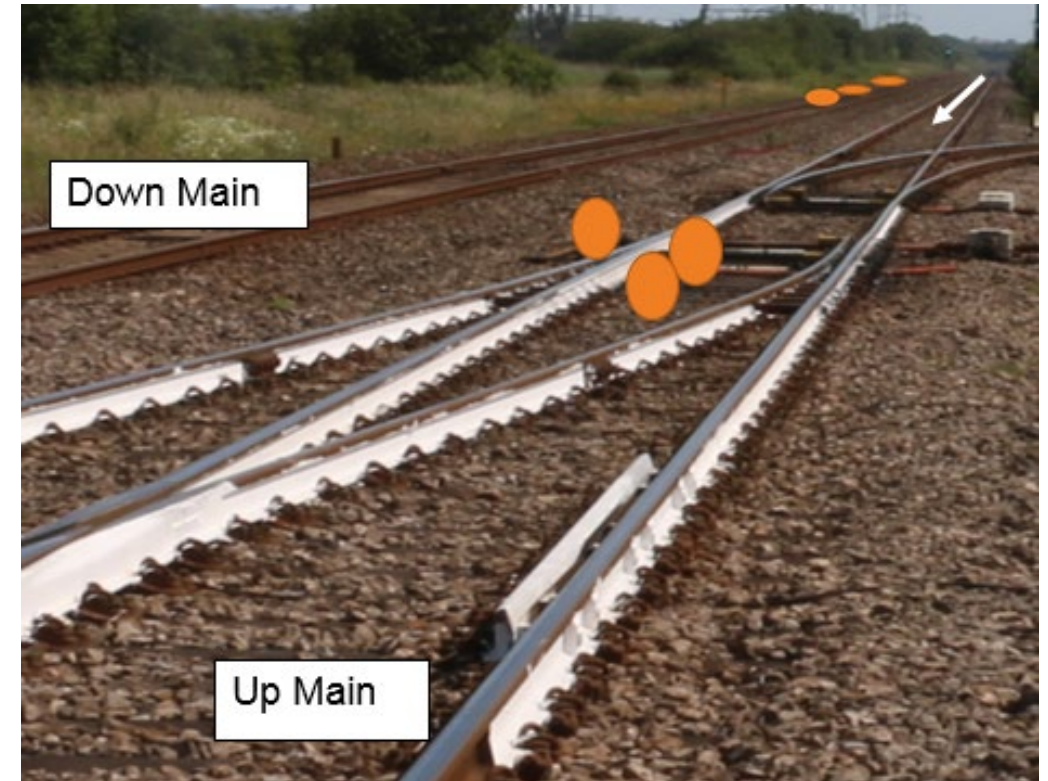
A third colleague escaped by inches.

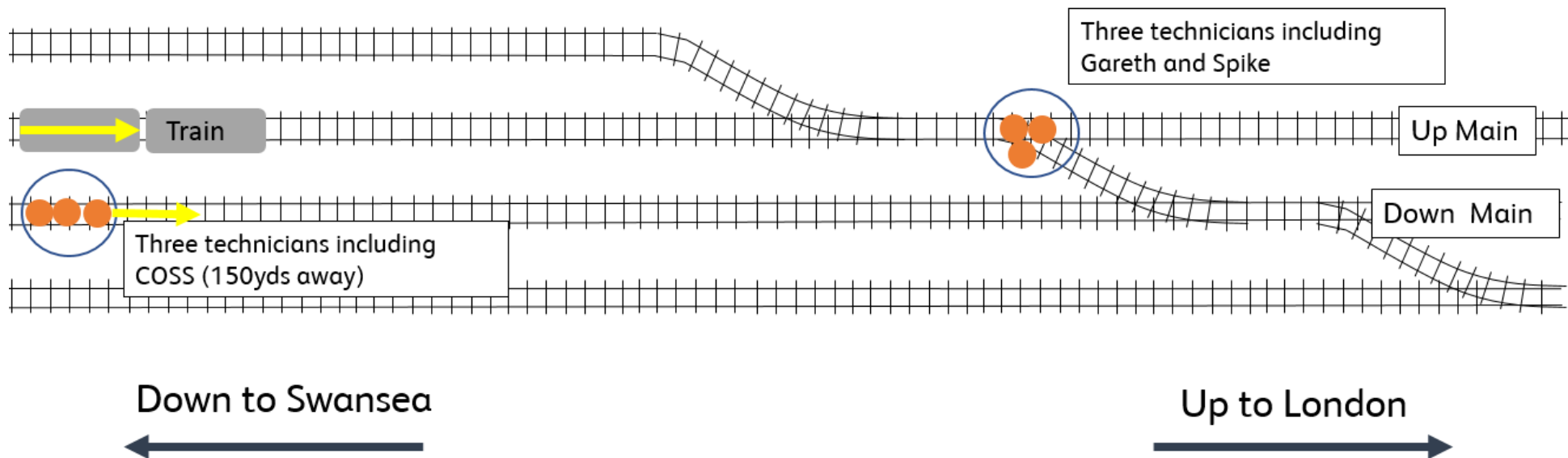
Margam East Junction double fatality

After changes to the order and type of work and while the Controller of Site Safety (COSS) was temporarily working further down the line, Gareth and Spike started work on an open line with their colleague using a petrol-engine impact driver to tighten bolts in a crossing.

They were all wearing ear defenders due to the high noise levels. When a bolt seized, they all became focussed on the task with no-one looking out.

When the train approached at approximately 70mph, both men were struck and fatally injured. The third colleague escaped impact with just inches to spare.





- Work was planned in the afternoon in a line blockage. But the safe work pack contained a second option to work with unassisted lookouts. The COSS was told to use the second system and appointed distant and site lookouts
- The team decided to do extra work that wasn't in the plan. Some of the extra work involved noisy plant to maintain bolts in a crossing at PT9577B points
- A group of three including the COSS, site lookout and another moved about 150 yards away, leaving their colleagues to wait for their return.
- The other three left at the points started to work on the crossing bolts. There was no appointed COSS with them, no safe system of work and no distant lookout in place.
- The Person in Charge said he would look out then became involved in the work, focussing on the bolts. None of them saw the train coming.

Interim report findings

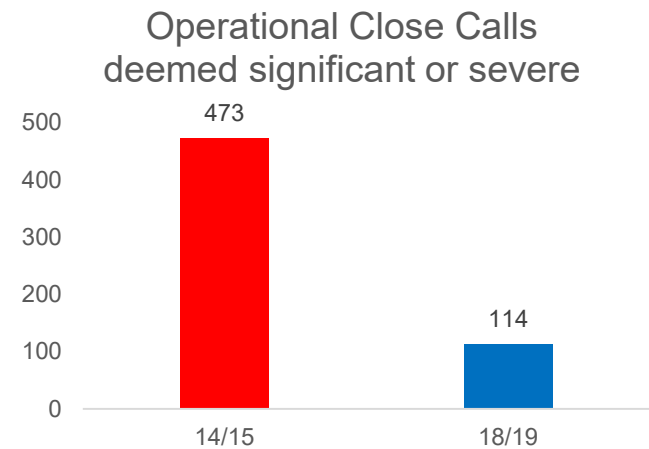
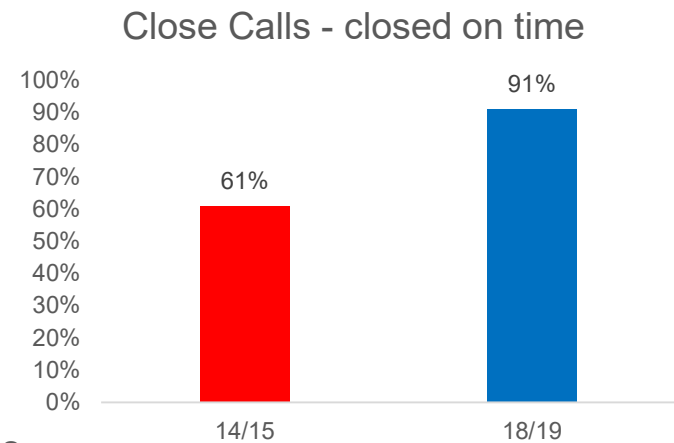
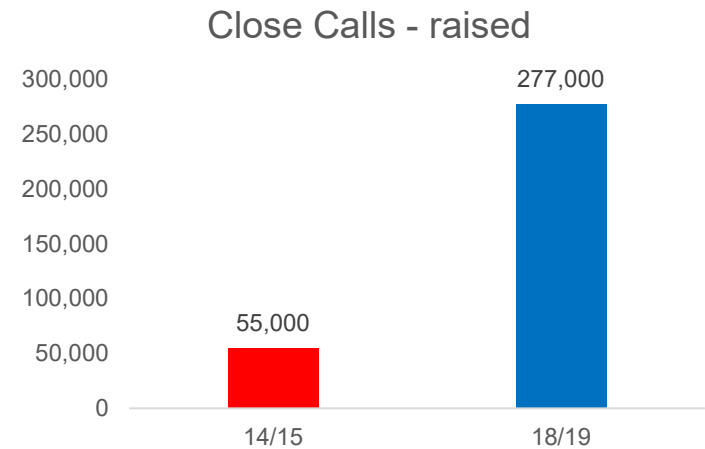
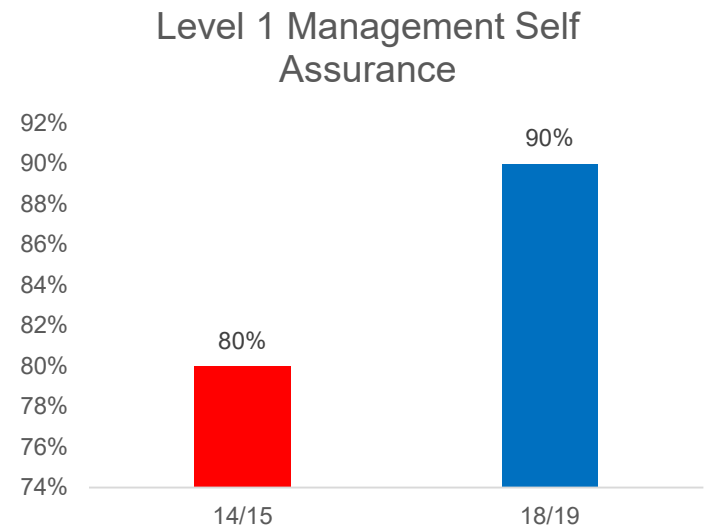
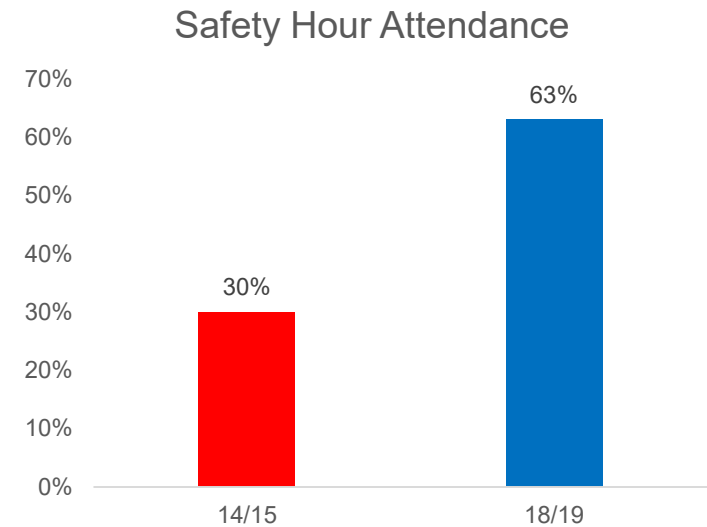
- The Safe Work Pack did not specify all of the work and how it was to be safely undertaken.
- The COSS was only appointed that morning. His authority was then undermined – the PIC didn't believe a distant lookout was needed.
- There was no safe system of work in place. The COSS was not with the group involved when the accident occurred.
- The group all became focussed on the task and were unaware of an approaching train.
- The wide experience of the closely-knit group and familiarity with each other potentially affected their perception of risk.

Planning

Supervision

Obviously wrong

Performance metrics





Lessons I invite you to take away:

- Choose the right performance indicators
- Check for any false evidence
- Corroborate with what really happens on site
- Celebrate the positive
- Chronic unease - stay sceptical

