

Weather Resilience and Climate Change Adaptation

LNE/EM Route Periodic Performance Report – 2017/2018 P1

Figure 1 provides an overview of the impact of different weather related events by day for period 1 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P1 2017 LNE/EM

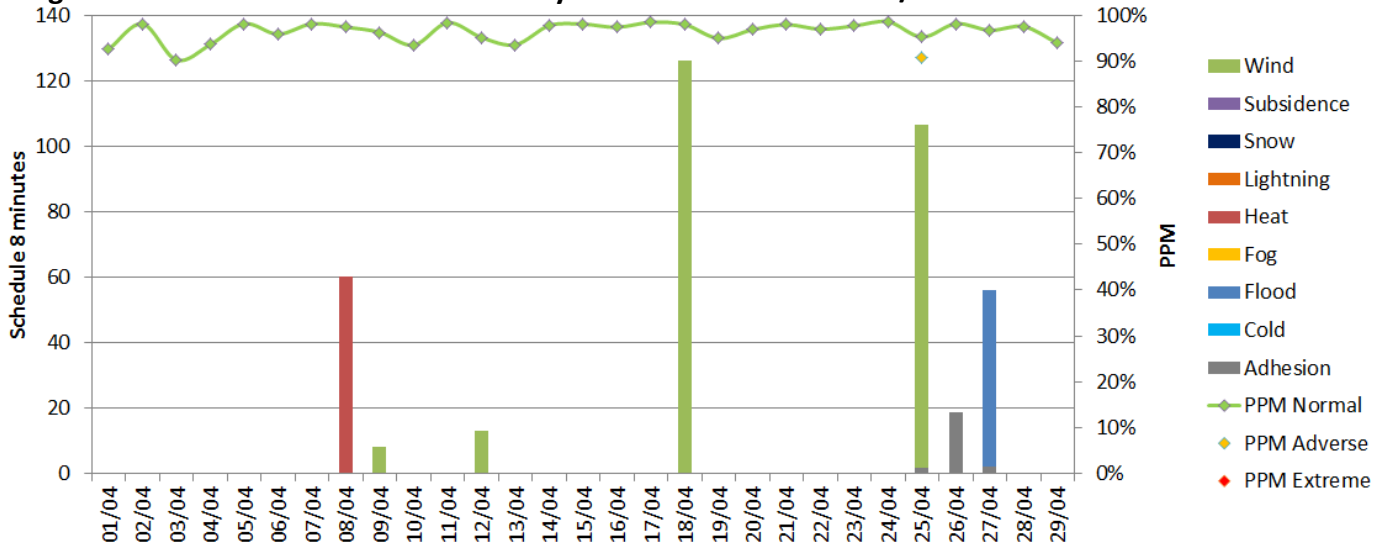
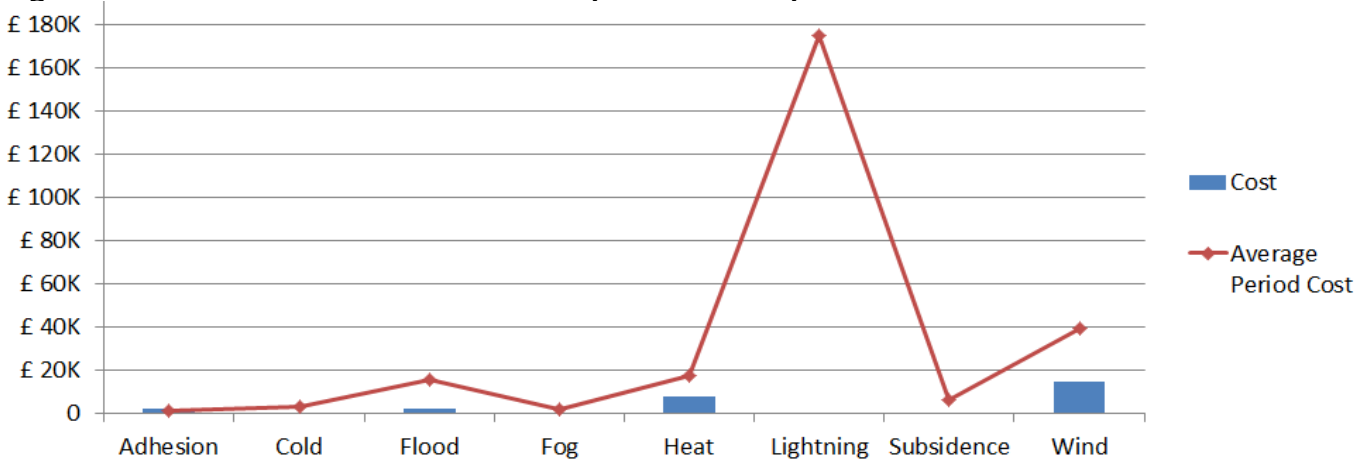


Figure 2 Weather related Schedule 8 cost impact for P1 LNE/EM



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Table 1 Top 10 weather related incidents P1

Date	IncidentDescription	stanoxSection	Route	Weather Category	Minutes	Cost
25/04/2017	HPD TREE ON OVERHEADS	Luton : St Albans City	EAST MIDLANDS	Wind	96	£10,712.43
08/04/2017	CRI 20 ESR CRT UFL	St Albans City : West Hampstead Thameslink	EAST MIDLANDS	Heat	60	£7,850.82
27/04/2017	LOWGATS TC FLR	Eaglescliffe : Northallerton	LNE	Flood	54	£2,242.52
26/04/2017	1D07 2 LOST KET	Kettering	EAST MIDLANDS	Adhesion	18.5	£1,916.18
18/04/2017	SHPYDJN PLASTIC ON OHL	Shipley : Guiseley	LNE	Wind	121	£1,454.24
12/04/2017	LDS OHL PLASTIC BAG PLT8	Leeds	LNE	Wind	8	£1,017.98
09/04/2017	CNNGABR OBJECT ON LINE	Peterborough : Huntingdon	LNE	Wind	8	£837.04
18/04/2017	LEAGRVJ OBJECT ON OHL	Flitwick : Luton	EAST MIDLANDS	Wind	5	£752.75
27/04/2017	1D69 4 LOST XTR NTNGMJN WR	Mansfield Jn : Trent East Jn	EAST MIDLANDS	Adhesion	2	£301.10
25/04/2017	GOSBRTN WIND	Sleaford : Spalding	LNE	Wind	9	£64.26

Weather Resilience and Climate Change Adaptation

LNE/EM Route Periodic Performance Report – 2017/2018 P2

Figure 1 provides an overview of the impact of different weather related events by day for period 2 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P2 2017 LNE/EM

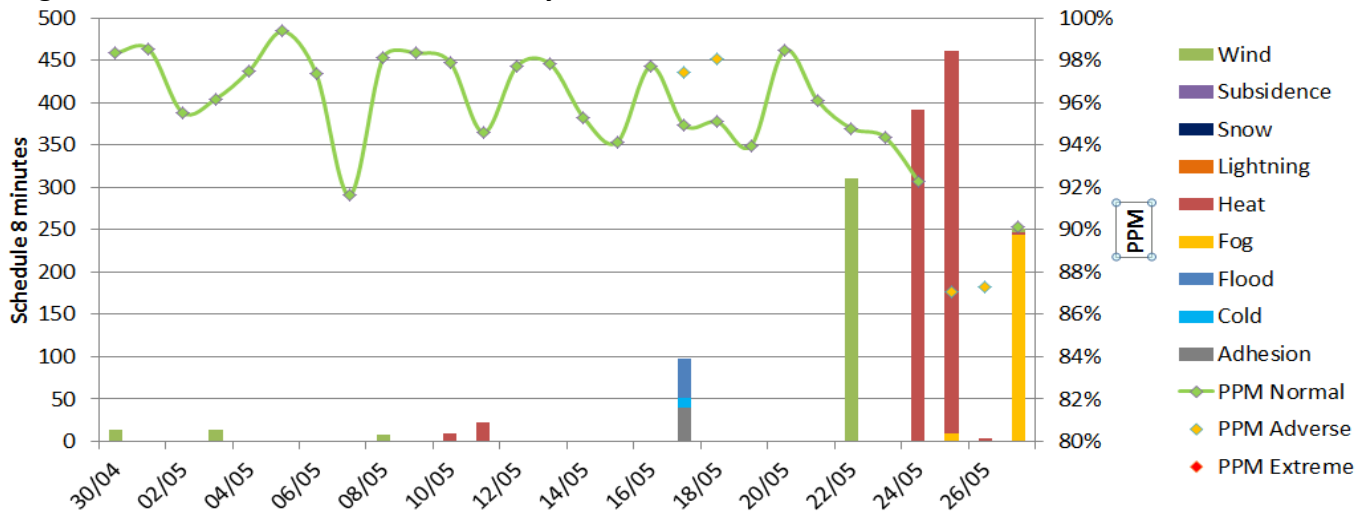
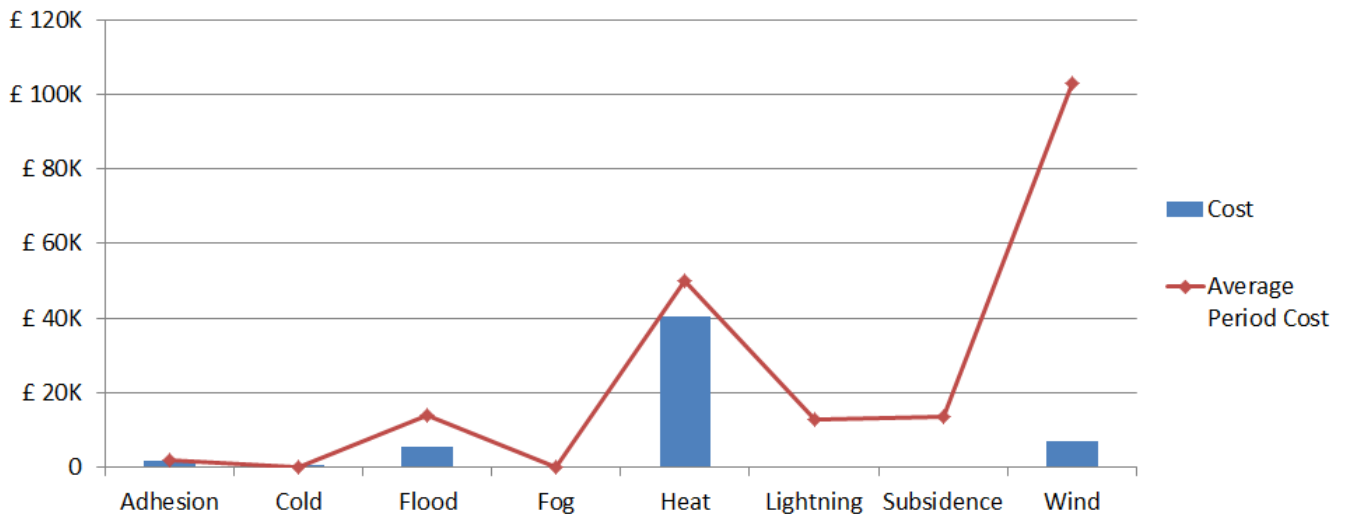


Figure 2 Weather related Schedule 8 cost impact for P2 LNE/EM



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Table 1 Top 10 weather related incidents P2

Date	IncidentDescription	stanoxSection	Route	Weather Category	Minutes	Cost
24/05/2017	WRS 25/20 ESR UM HEAT	Selby : Gilberdyke	LNE	Heat	136	£7,322.40
24/05/2017	THI ESR DFL HEAT	Northallerton : Thirsk	LNE	Heat	44	£6,928.66
25/05/2017	WKF WHRDJN DN 20 ESR HEAT	Whitehall Jn : Wakefield Westgate	LNE	Heat	29	£4,779.52
25/05/2017	THI NTR 20 ESR HEAT SPEED DM	Northallerton : Thirsk	LNE	Heat	31	£4,656.02
24/05/2017	BTB 20 ESR HEAT SPEED DL	Brocklesby Jn. : Wrawby Jn	LNE	Heat	155	£4,018.82
22/05/2017	SON OBJECT OHL	Skipton : Keighley	LNE	Wind	310	£3,521.60
25/05/2017	ELR 20 ESR HEAT SPEED UL	Barnsley : Meadowhall	LNE	Heat	167	£3,124.12
17/05/2017	MIL FLOODING	St Albans City : West Hampstead Thameslink	EAST MIDLANDS	Flood	47	£2,851.06
27/05/2017	BLD FLOODING	Shipton : Guiseley	LNE	Flood	244	£2,771.84
24/05/2017	SHEETSJ 30/60 ESR CRT	Sheet Stores Jn : Derby	EAST MIDLANDS	Heat	17	£2,292.98

Weather Resilience and Climate Change Adaptation

LNE/EM Route Periodic Performance Report – 2017/2018 P3

Figure 1 provides an overview of the impact of different weather related events by day for period 3 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P3 2017 LNE/EM

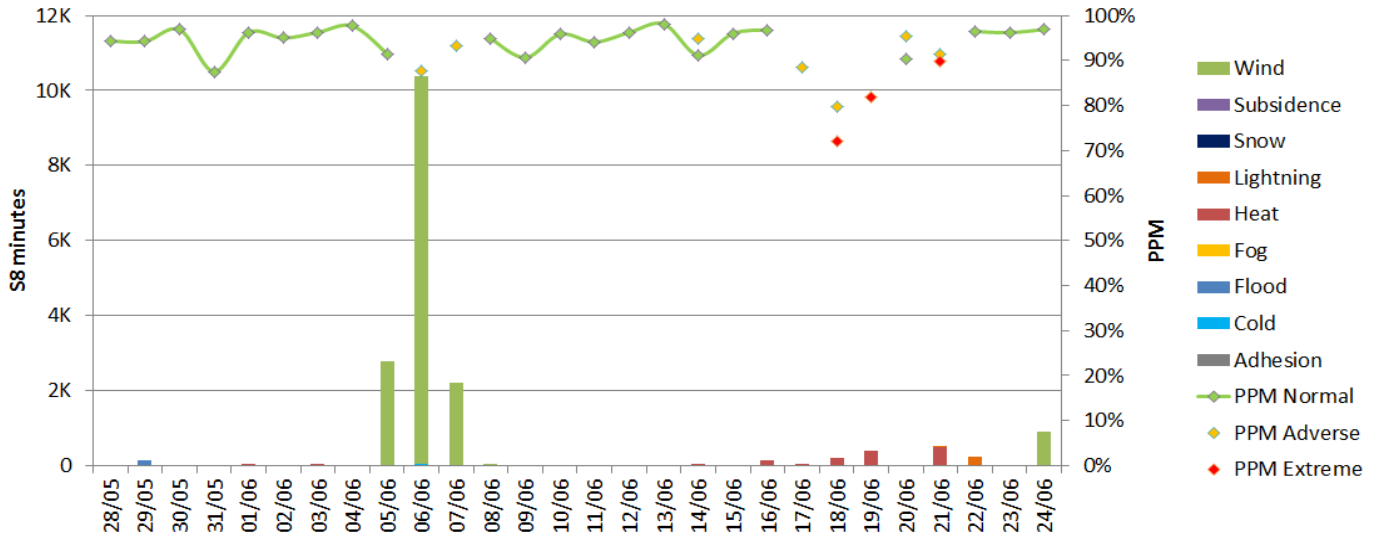
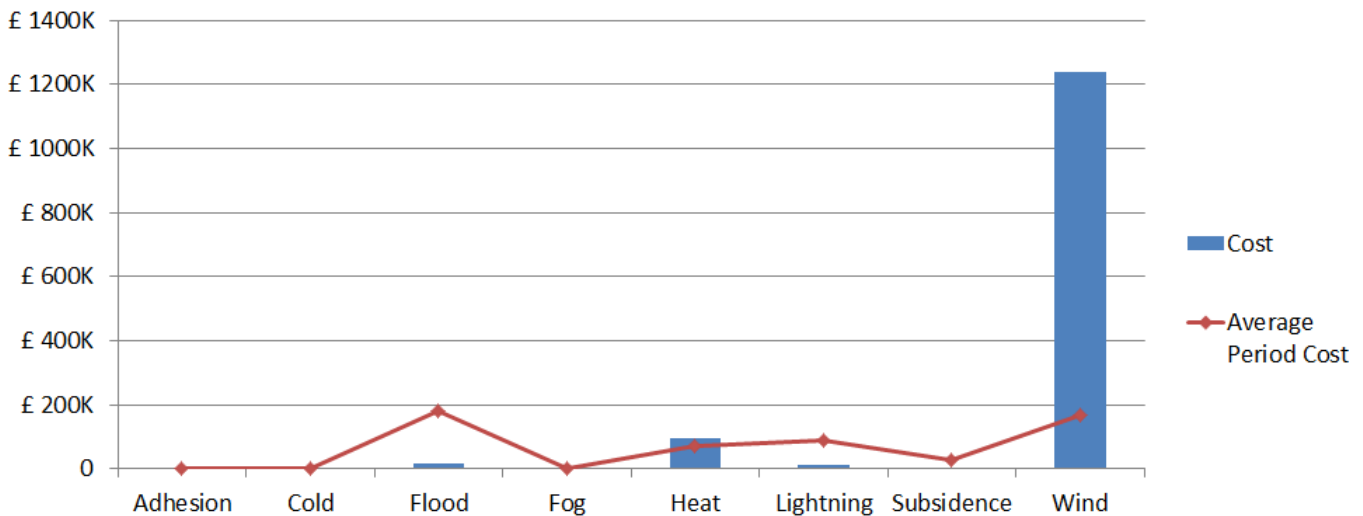


Figure 2 Weather related Schedule 8 cost impact for P3 LNE/EM



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Table 1 Top 10 weather related incidents P3

Date	IncidentDescription	stanoxSection	Route	Weather Category	Minutes	Cost
06/06/2017	WHP SAC TREE ON OLE	St Albans City : West Hampstead Thameslink	EAST MIDLANDS	Wind	7328.66	£775,743.07
07/06/2017	1E18 PLASTIC ON OHLE DHM	Durham	LNE	Wind	1348	£153,120.04
06/06/2017	NSG BAG ON OLE	Potters Bar : Alexandra Palace	LNE	Wind	1203.16	£105,356.73
24/06/2017	SNA EXT OBJECT	Wakefield Kirkgate : Hare Park Junction	LNE	Wind	898	£77,426.37
21/06/2017	XGN 20MPH DF/DS HEAT SPEED	Woolmer Green Jn. : Welwyn Garden City	LNE	Heat	444	£50,839.64
06/06/2017	STMARYS TREE ON THE LINE	Ambergate Jn : Derby	EAST MIDLANDS	Wind	318	£22,718.45
06/06/2017	SAC WHP BAG ON OHL	St Albans City : West Hampstead Thameslink	EAST MIDLANDS	Wind	168.5	£22,597.60
07/06/2017	ALF 1L10 STRUCK A TREE	Chesterfield : Ironville Junction	EAST MIDLANDS	Wind	678	£22,381.61
06/06/2017	HAT SEC 18 TRIPPED PBR WGC	Welwyn Garden City : Potters Bar	LNE	Wind	238.959	£17,971.87
29/05/2017	WHP SEV FLOOD	West Hampstead Thameslink	EAST MIDLANDS	Flood	141	£15,580.31



Weather Resilience and Climate Change Adaptation

LNE/EM Route Periodic Performance Report – 2017/2018 P4

Figure 1 provides an overview of the impact of different weather related events by day for period 4 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P4 2017 LNE/EM

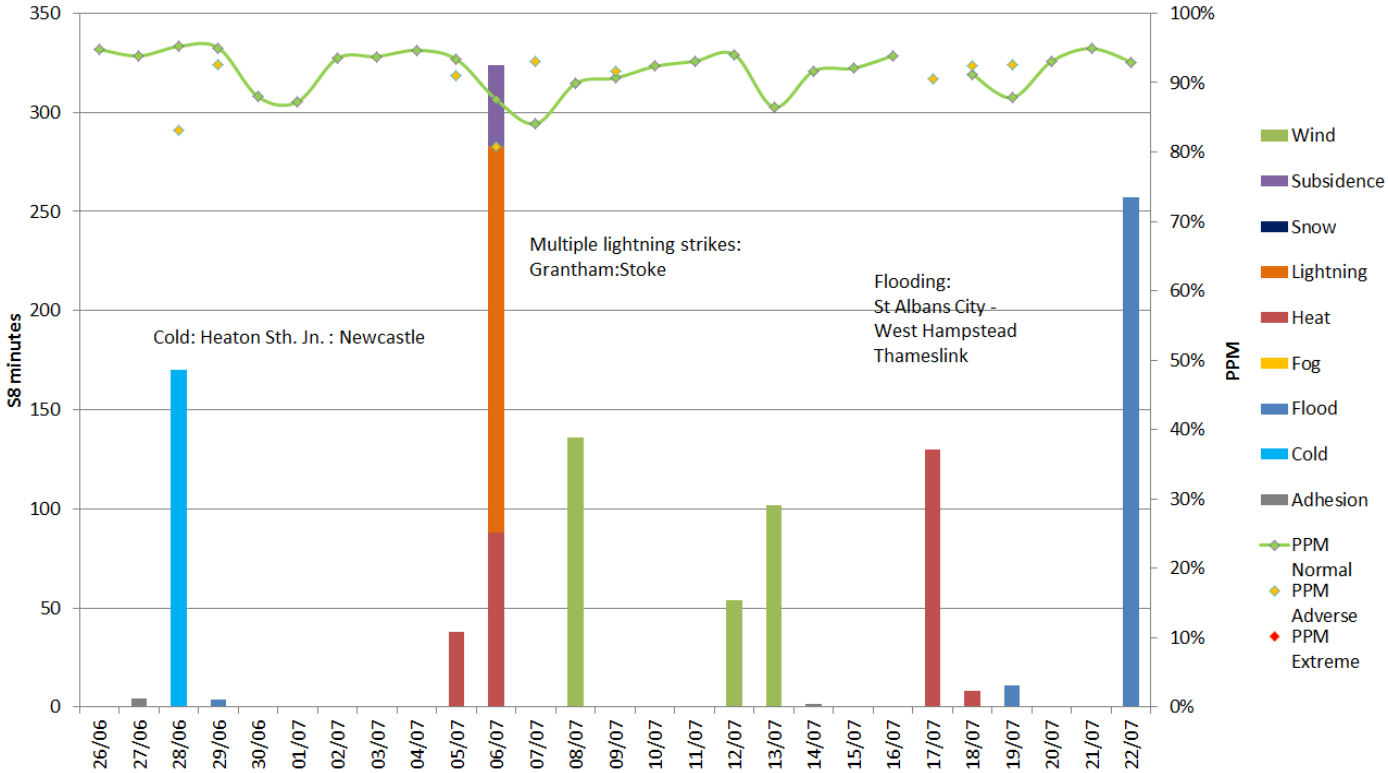
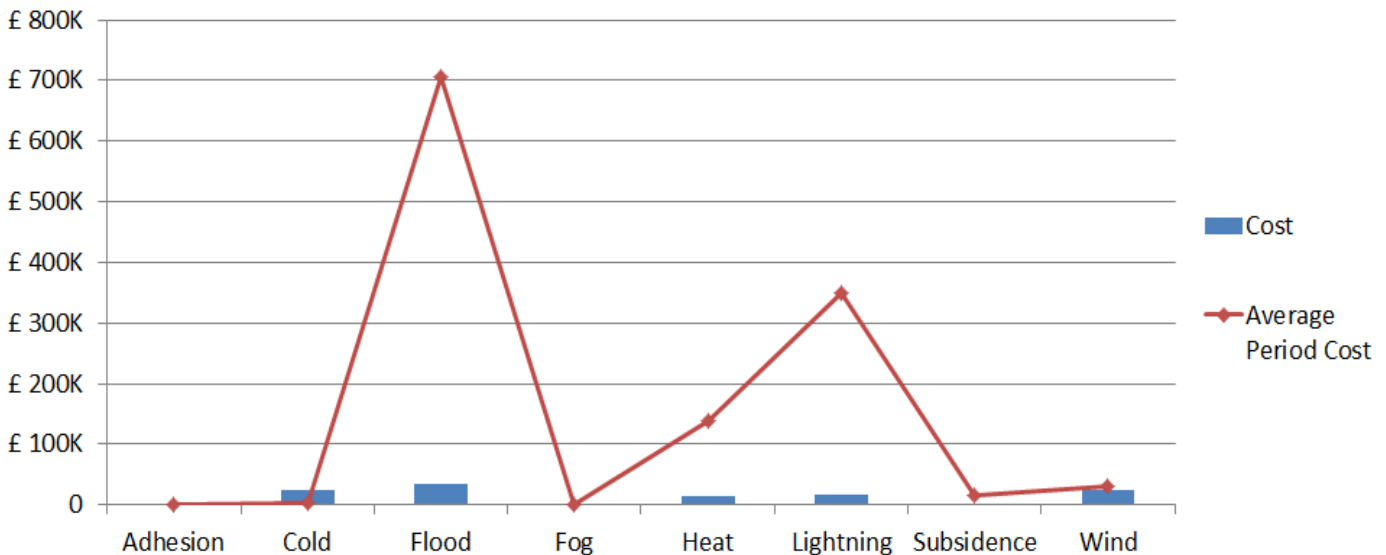


Figure 2 Weather related Schedule 8 cost impact for P4 LNE/EM



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Contact Lisa Constable, WRCCA Strategy Manager, lisa.constable@networkrail.co.uk, with questions or comments

Weather Resilience and Climate Change Adaptation

LNE/EM Route Periodic Performance Report – 2017/2018 P5

Figure 1 provides an overview of the impact of different weather related events by day for period 5 in relation to delay minutes and PPM performance for LNE/EM Route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P5 2017 LNE/EM

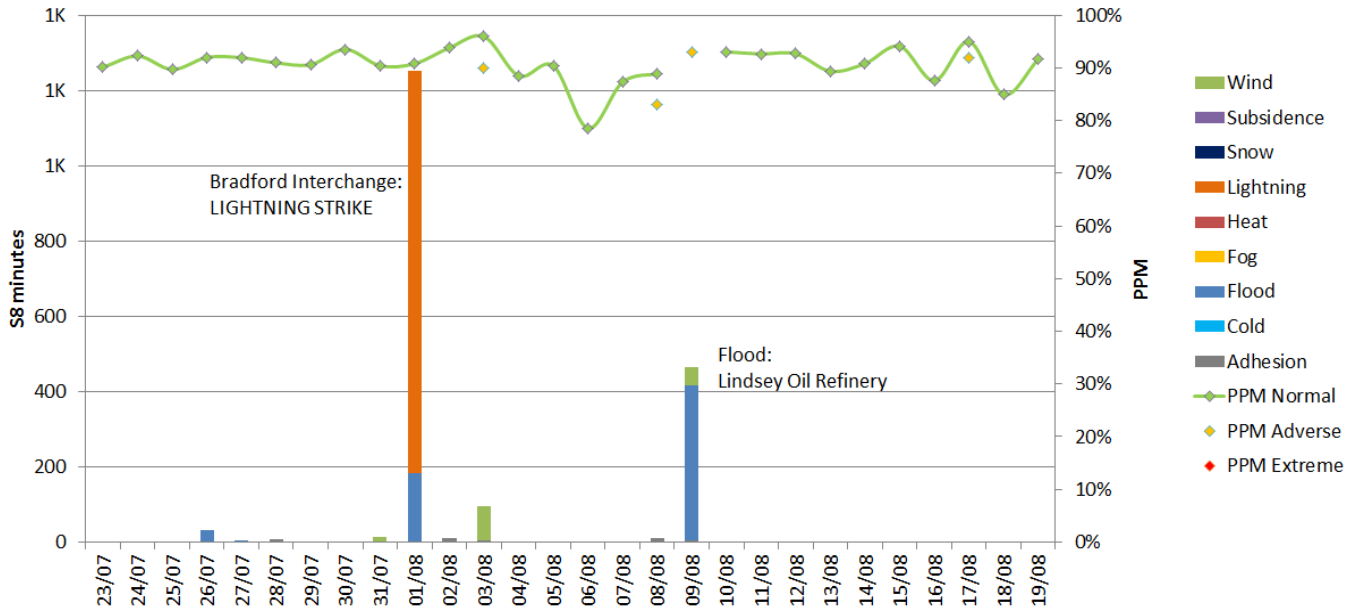
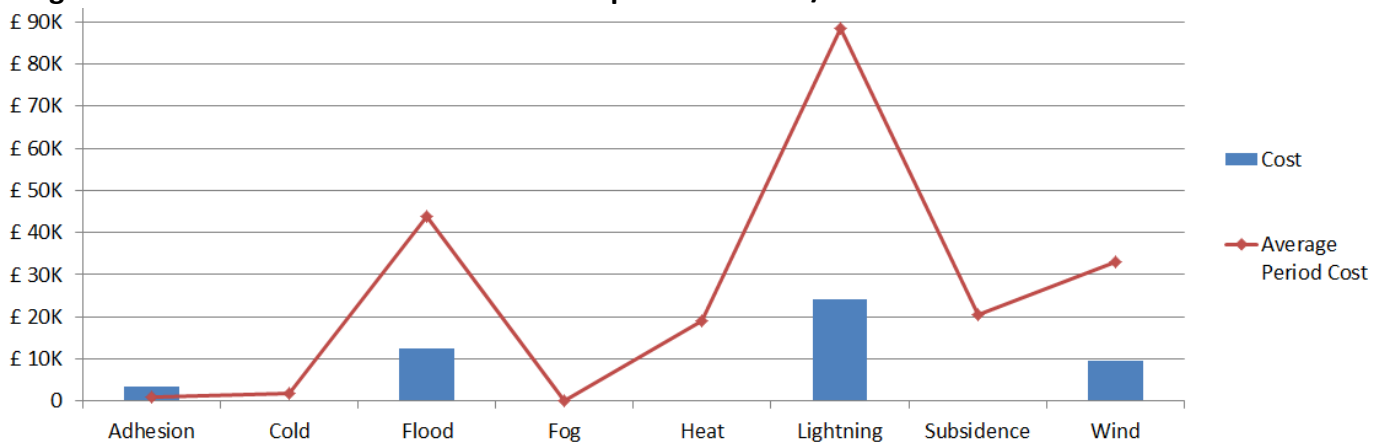


Figure 2 Weather related Schedule 8 cost impact for P5 LNE/EM



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Table 1 Top 10 weather related incidents P5

Date	IncidentDescription	stanoxSection	Route	Weather Category	Minutes	Cost
01/08/2017	BDI LIGHTNING STRIKE	Bradford Interchange	LNE	Lightning	1070	£24,059.16
09/08/2017	IMNGHRJ ULC FLOODING	Lindsey Oil Refinery	LNE	Flood	414	£8,753.10
09/08/2017	KGX BALLON ON OHL	Belle Isle : London Kings Cross	LNE	Wind	47	£6,940.26
01/08/2017	KEI SKI SEV FLOOD	Keighley	LNE	Flood	183	£2,278.08
26/07/2017	MALTKKA FLOODING	Malton : York	LNE	Flood	31	£1,363.57
31/07/2017	1Y86 WIND DON	Doncaster	LNE	Wind	11	£1,176.03
08/08/2017	1C93 3 LOST CHD XAJ	Chesterfield : Ambergate Jn	EAST MIDLANDS	Adhesion	10	£1,028.29
03/08/2017	SKI EXT OBJECT	Skipton	LNE	Wind	71	£906.16
02/08/2017	1P49 2 LOST BDM FLT	Bedford : Flitwick	EAST MIDLANDS	Adhesion	2.5	£402.27
26/07/2017	1B48 2 LOST LEI WGSTNNJ	Leicester : Wigston North Jn	EAST MIDLANDS	Adhesion	2	£318.36



Weather Resilience and Climate Change Adaptation

LNE/EM Route Periodic Performance Report – 2017/2018 P6

Figure 1 provides an overview of the impact of different weather related events by day for period 6 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P6 2017 LNE/EM

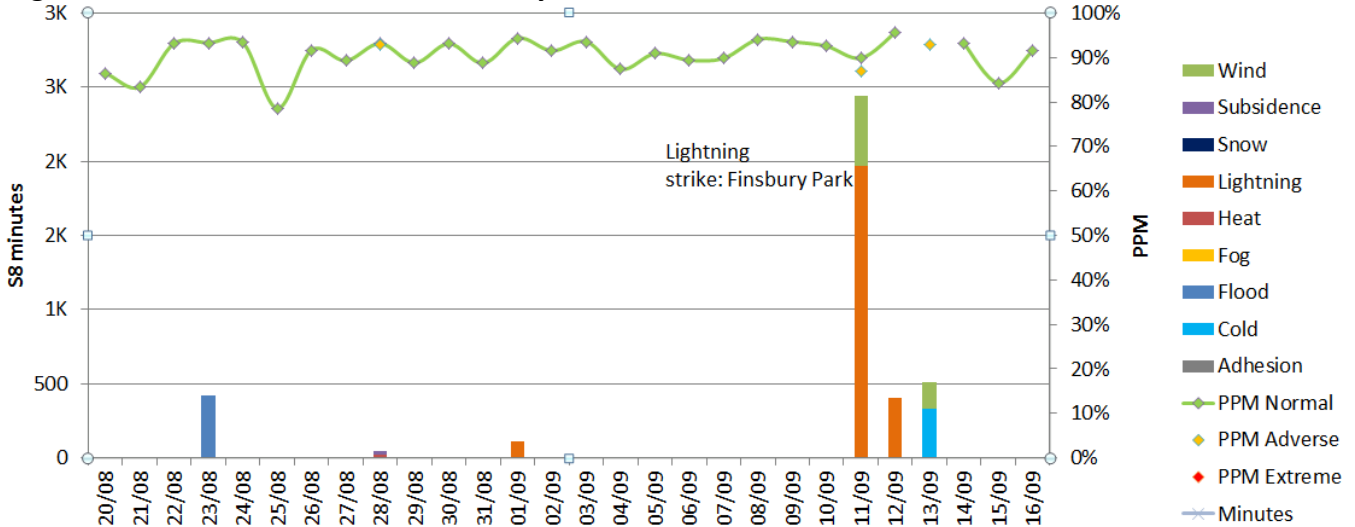
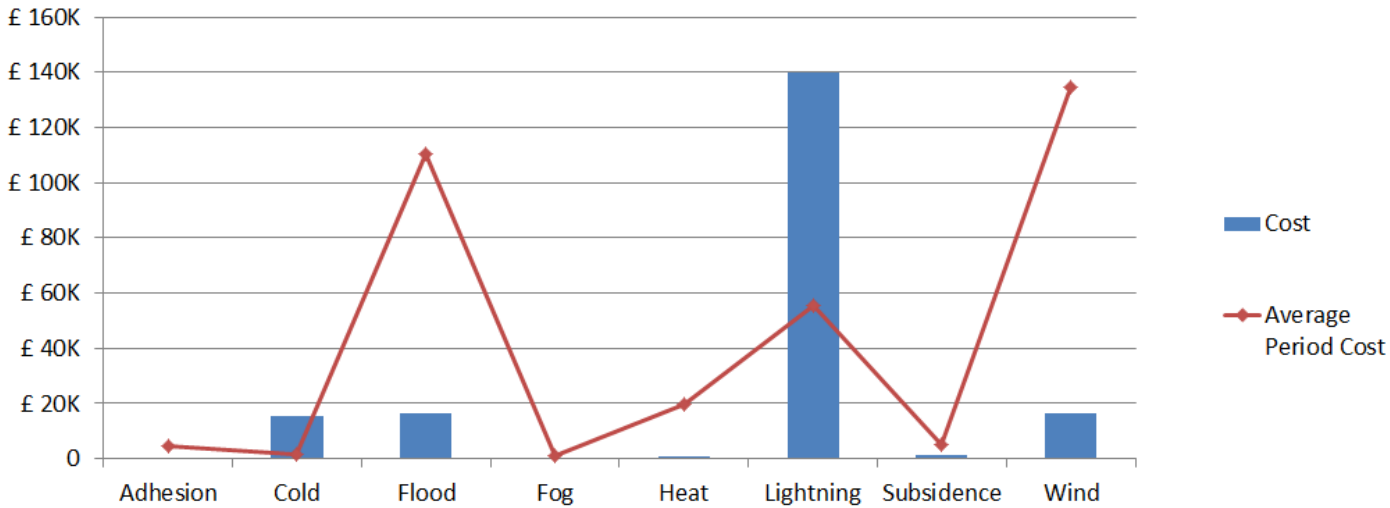


Figure 2 Weather related Schedule 8 cost impact for P6 LNE/EM



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Table 1 Top 10 weather related incidents P6

Date	IncidentDescription	stanoxSection	Route	Weather Category	Minutes	Cost
11/09/2017	FPK LIGHTNING STRIKE	Finsbury Park	LNE	Lightning	1966.18	£105,473.43
12/09/2017	EXR SIG FLR	Finsbury Park : Old Street	LNE	Lightning	406.52	£17,840.12
01/09/2017	SDY LC FLR	Huntingdon : Sandy	LNE	Lightning	107	£16,803.54
23/08/2017	GRF FLOODING	Micklefield : Leeds	LNE	Flood	422	£16,459.95
13/09/2017	NSG LOW ADHESION	Potters Bar : Alexandra Palace	EAST MIDLANDS	Cold	271.74	£14,386.72
13/09/2017	WGC ARL 80 MPH WIND ESR	Woolmer Green Jn. : Welwyn Garden City	LNE	Wind	52	£7,649.93
11/09/2017	HLTNLMR TREE	Wrawby Jn	LNE	Wind	406	£5,319.41
13/09/2017	HFX BDI BRANCH ON LINE WIND	Halifax : Bradford Interchange	LNE	Wind	74	£1,196.71
28/08/2017	MAT XAJ LANDSLIDE	Matlock : Ambergate Jn	EAST MIDLANDS	Subsidence	18	£1,132.39
13/09/2017	5M06 STRUCK BRANCHES DBY	Sheet Stores Jn : Derby	EAST MIDLANDS	Wind	46	£1,071.42



Weather Resilience and Climate Change Adaptation

LNE/EM Route Periodic Performance Report – 2017/2018 P7

Figure 1 provides an overview of the impact of different weather related events by day for period 7 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P7 2017 LNE/EM

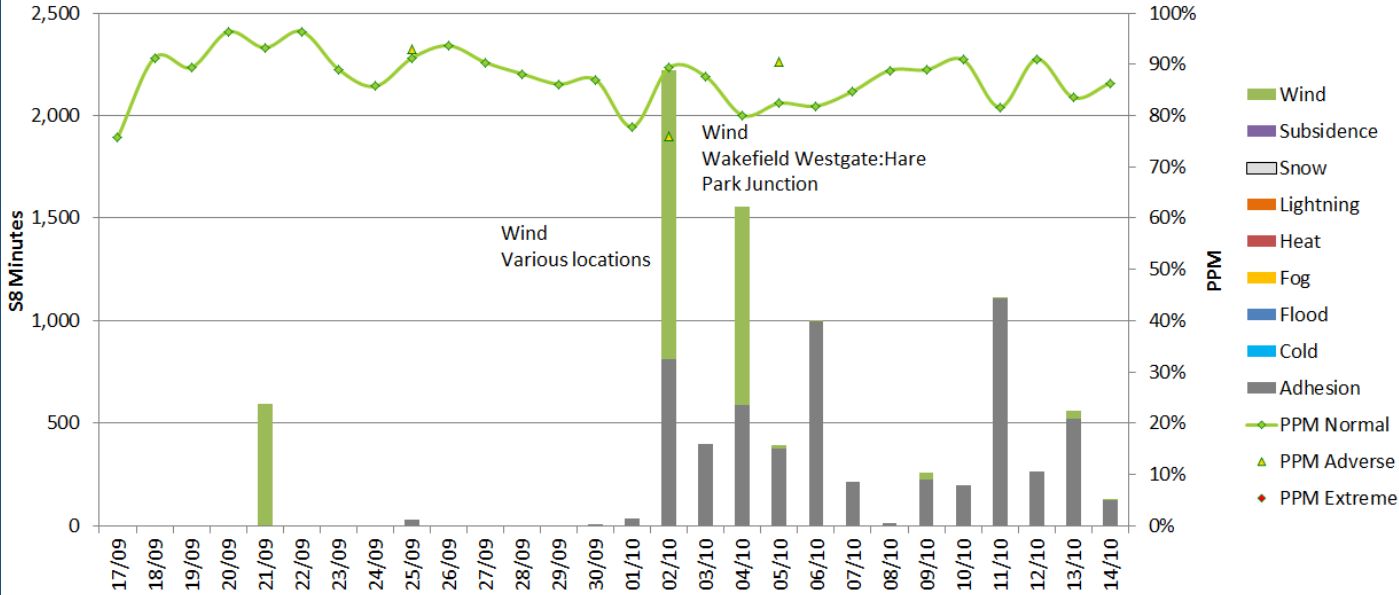
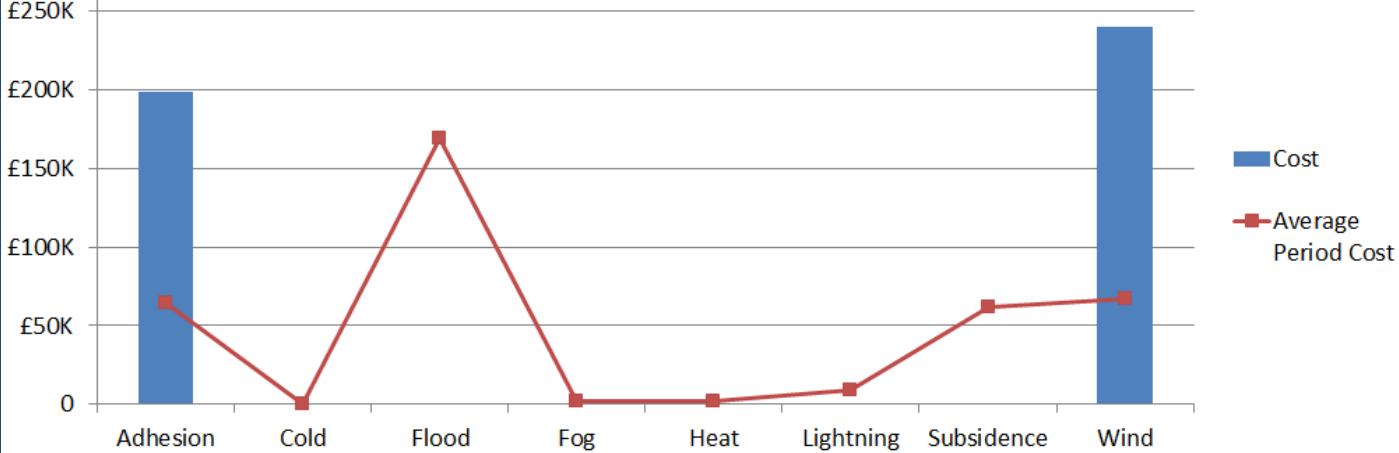


Figure 2 Weather related Schedule 8 cost impact for P7



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Table 1 Top 10 weather related incidents P7

Date	IncidentDescription	stanoxSection	WeatherCategory	Minutes	Cost
04/10/2017	SNA HIGH WIND	Wakefield Westgate : Hare Park Junction	Wind	963.5	£81,737
21/09/2017	MIL BALLOON ON OHL	St Albans City : West Hampstead Thameslink	Wind	596.28	£57,146
02/10/2017	CLSTOXO EXT OBJECT	King Edward Bridge South Jn : Durham	Wind	419	£54,231
02/10/2017	BWK BELFORD 80MPH ESR WIND	Berwick-Upon-Tweed : Belford L.C.	Wind	406	£18,754
05/10/2017	HAT RAILHEAD	Welwyn Garden City : Potters Bar	Adhesion	221.37	£12,826
02/10/2017	YORKSTB OBJECT ON LINE	Malton : York	Wind	277	£10,734
02/10/2017	XES METHLYJ 3/5 WORKING	Engine Shed Jn. : Methley Jn	Adhesion	473	£8,128
06/10/2017	HGT 26 TC FLR	Harrogate	Adhesion	117	£7,902
06/10/2017	BGH 22 TC FLR	Bradley Wood Jn	Adhesion	151	£7,207
04/10/2017	6J57 PRHC DEEPCAR	Rotherham Central : Tinsley S.S.	Adhesion	279.96	£6,675



Weather Resilience and Climate Change Adaptation

Route Periodic Performance Report – 2017/2018 P8

Figure 1 provides an overview of the impact of different weather related events by day for period 8 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P8 2017 LNE/EM

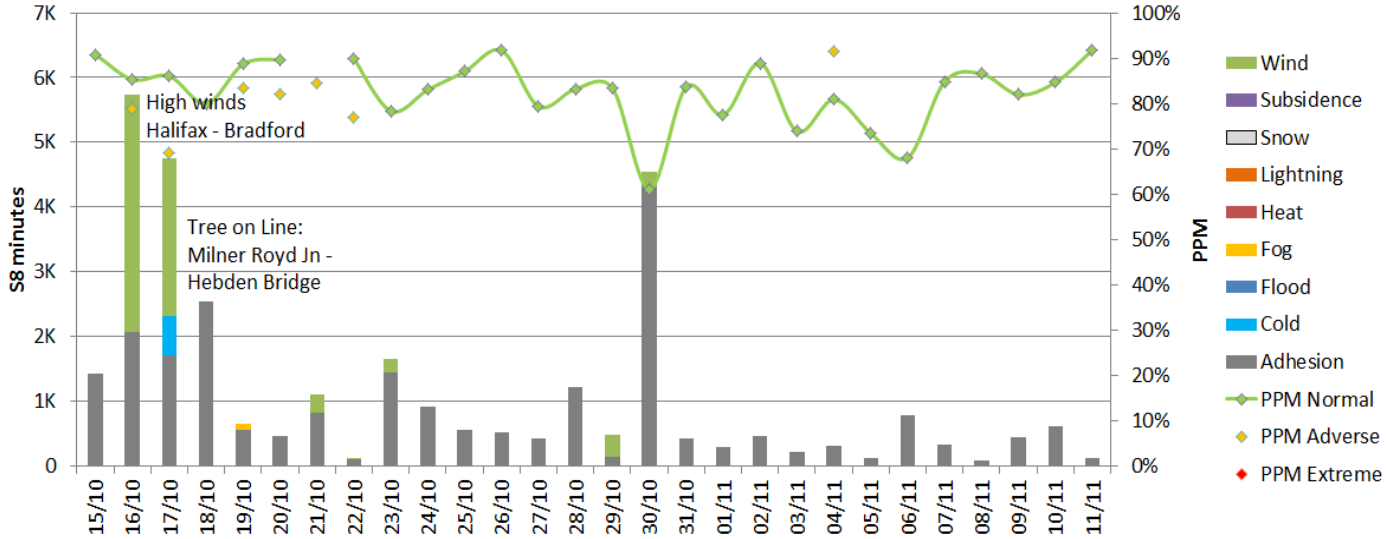
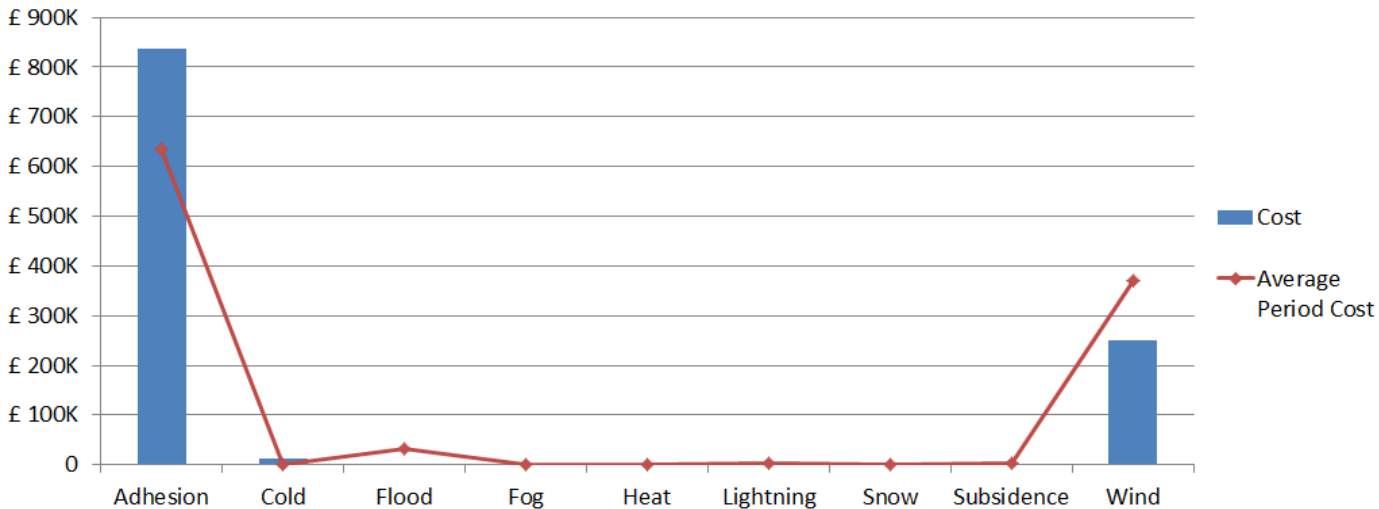


Figure 2 Weather related Schedule 8 cost impact for P8 LNE/EM



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Table 1 Top 10 weather related incidents P8

Date	IncidentDescription	stanoxSection	Route	Weather Category	Minutes	Cost
16/10/2017	HFX HIGH WINDS	Halifax : Bradford Interchange	LNE	Wind	2828.5	£65,571.84
16/10/2017	XES METHLYJ 3/5 WORKING	Engine Shed Jn. : Methley Jn	LNE	Adhesion	552	£60,715.07
30/10/2017	BGH 3.5 WORKING LEAVES	Heaton Lodge Jn : Milner Royd Jn	LNE	Adhesion	2357.5	£48,228.02
29/10/2017	1E08 BRTLYJN BAG ON PANTO	King Edward Bridge South Jn : Durham	LNE	Wind	332	£45,671.01
17/10/2017	SOW TREE ON LINE 4M08	Milner Royd Jn : Hebden Bridge	LNE	Wind	1955	£39,554.05
30/10/2017	PRHC DEW	Whitehall Jn : Heaton Lodge Jn	LNE	Adhesion	954.5	£38,427.44
15/10/2017	XNK LCN 3-5 WORKING	Lindlncen : Newark F.C.	LNE	Adhesion	996	£33,990.77
30/10/2017	1S02 3 LOST DON SHFTHLJ	Shaftholme Jn : Doncaster	LNE	Adhesion	128.5	£31,664.16
16/10/2017	3S22 HIT OBJECT GRF	Micklefield : Leeds	LNE	Wind	688.5	£31,253.71
17/10/2017	PBR PRHC DS	Potters Bar	LNE	Adhesion	394.86	£31,184.97

Weather Resilience and Climate Change Adaptation

LNE/EM Route Periodic Performance Report – 2017/2018 P9

Figure 1 provides an overview of the impact of different weather related events by day for period 9 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P9 2017 LNE/EM

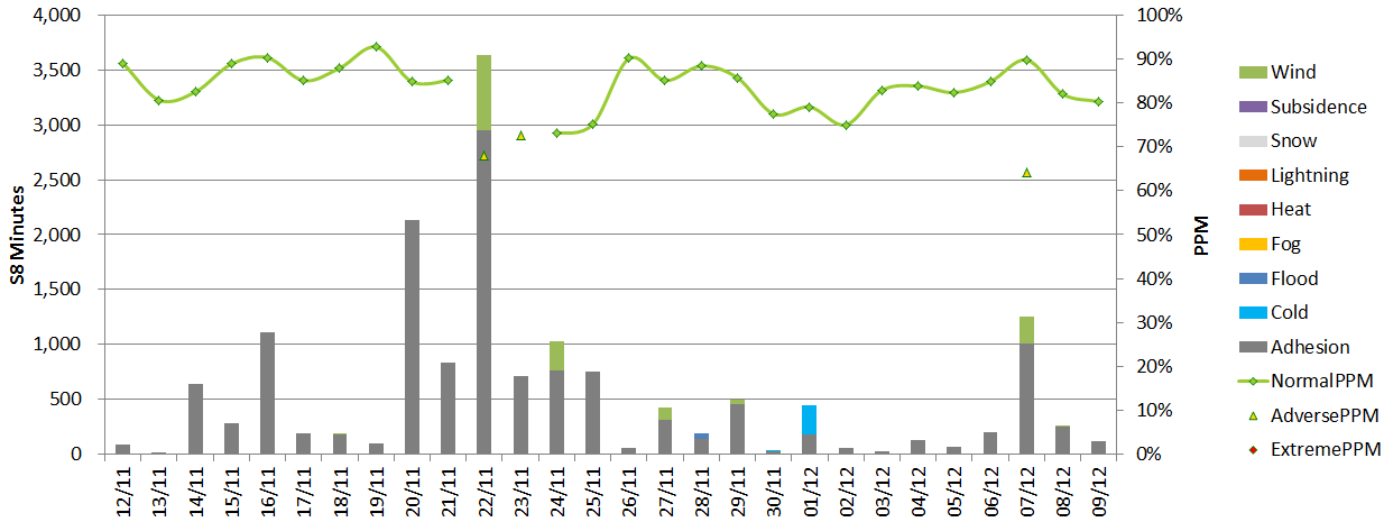
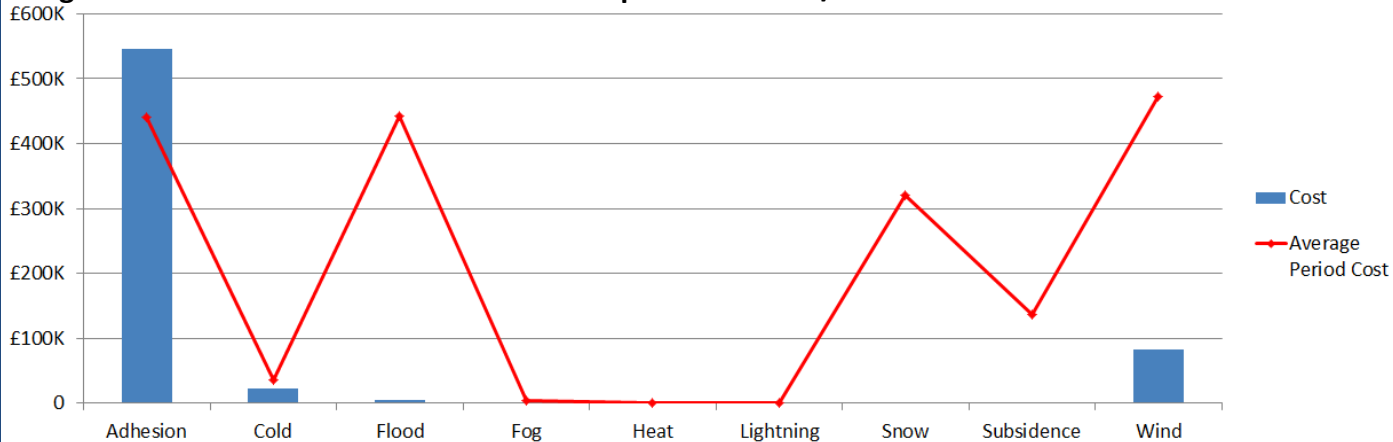


Figure 2 Weather related Schedule 8 cost impact for P9 LNE/EM



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Table 1 Top 10 weather related incidents P9

Date	IncidentDescription	stanoxSection	Weather Category	Delay Minutes	Cost
20/11/2017	LFNZ GDH HFN GTR (03)	Hertford North : Gordon Hill	Adhesion	815.63	£39,964.63
29/11/2017	1N83 ADHESION GRA	Grantham	Adhesion	129.5	£25,779.83
22/11/2017	NTR DHM BLKT SPEED WIND	Ferryhill Sth. Jn. : Darlington	Wind	295	£22,290.66
22/11/2017	SWD 2723 TC FLR	Linlncen : Newark F.C.	Adhesion	552	£22,103.65
01/12/2017	GBD G14 SIG FLR	Gilberdyke	Cold	239	£21,842.16
22/11/2017	METHLYJ STRTJN 3.5 WORKING	Engine Shed Jn. : Methley Jn	Adhesion	593	£21,808.45
24/11/2017	LOWFELJ BALLOON OHL	Newcastle : King Edward Bridge South Jn	Wind	266	£21,187.33
25/11/2017	3S23 TRACTION ISSUE YORKCRW	York Thrall Europa	Adhesion	394	£17,423.72
07/12/2017	1K18 PRHC COT	Whitehall Jn : Dewsbury	Adhesion	340.5	£13,690.23
20/11/2017	LFNZ PBR WGC GTR (03)	Welwyn Garden City : Potters Bar	Adhesion	162	£13,328.63



Weather Resilience and Climate Change Adaptation

LNE/EM Route Periodic Performance Report – 2017/2018 P10

Figure 1 provides an overview of the impact of different weather related events by day for period 10 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P10 2017/2018

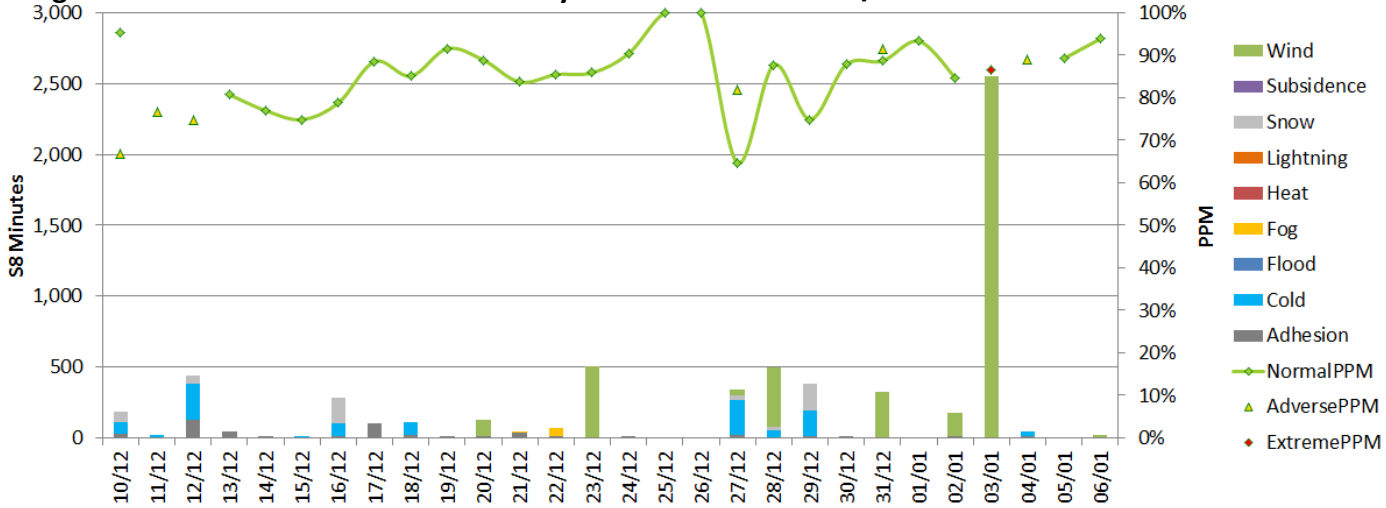
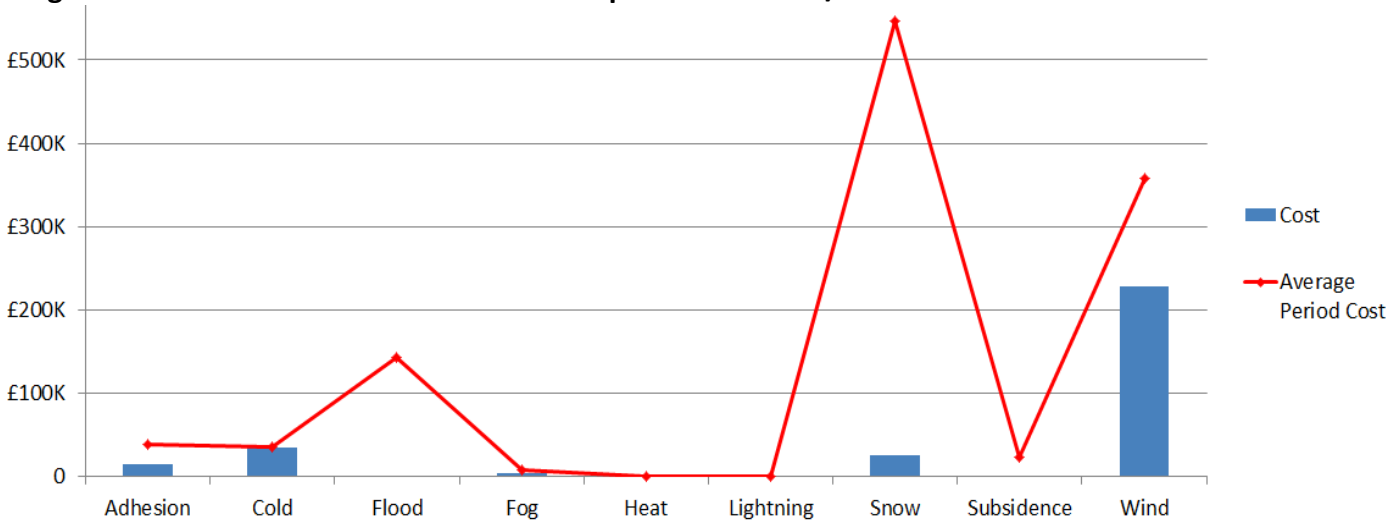


Figure 2 Weather related Schedule 8 cost impact for P10 LNE/EM



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Table 1 Top 10 weather related incidents P10

Date	IncidentDescription	stanoxSection	Route	Weather Category	Delay Minutes	Cost
28/12/2017	NNG GRA OHL OBSTRUCTION	Newark North Gate : Grantham	EAST MIDLANDS	Wind	425	£71,191.91
02/01/2018	GRA RET 80MPH ESR WIND	Newark North Gate : Grantham	EAST MIDLANDS	Wind	143	£27,895.80
03/01/2018	PBO SDY 80MPH ESR WIND	Peterborough : Huntingdon	LNE	Wind	150	£20,234.81
03/01/2018	SHY HIGH WIND	Shipley	LNE	Wind	1375	£17,716.25
23/12/2017	WHRDJN WKF BUILDERS BAG 1A20	Whitehall Jn : Wakefield Westgate	LNE	Wind	505	£16,322.95
20/12/2017	PBR TRACK SIGN FALLEN	Potters Bar : Alexandra Palace	EAST MIDLANDS	Wind	115	£13,350.44
03/01/2018	GRA TALNGTN 80MPH ESR WIND	Stoke Jn. : Tallington Jn.	LNE	Wind	56	£11,735.59
31/12/2017	BELFORD BWK 80MPH ESR WIND	Berwick-Upon-Tweed : Belford L.C.	LNE	Wind	41	£10,701.00
10/12/2017	KGX PBO KEY ROUTE STRATEGY	London Kings Cross	LNE	Cold	60	£8,913.84
03/01/2018	YRK TEMPLHJ 80MPH ESR WIND	York	LNE	Wind	37	£8,186.86



Weather Resilience and Climate Change Adaptation

LNE/EM Route Periodic Performance Report – 2017/2018 P11

Figure 1 provides an overview of the impact of different weather related events by day for period 11 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P11 2018

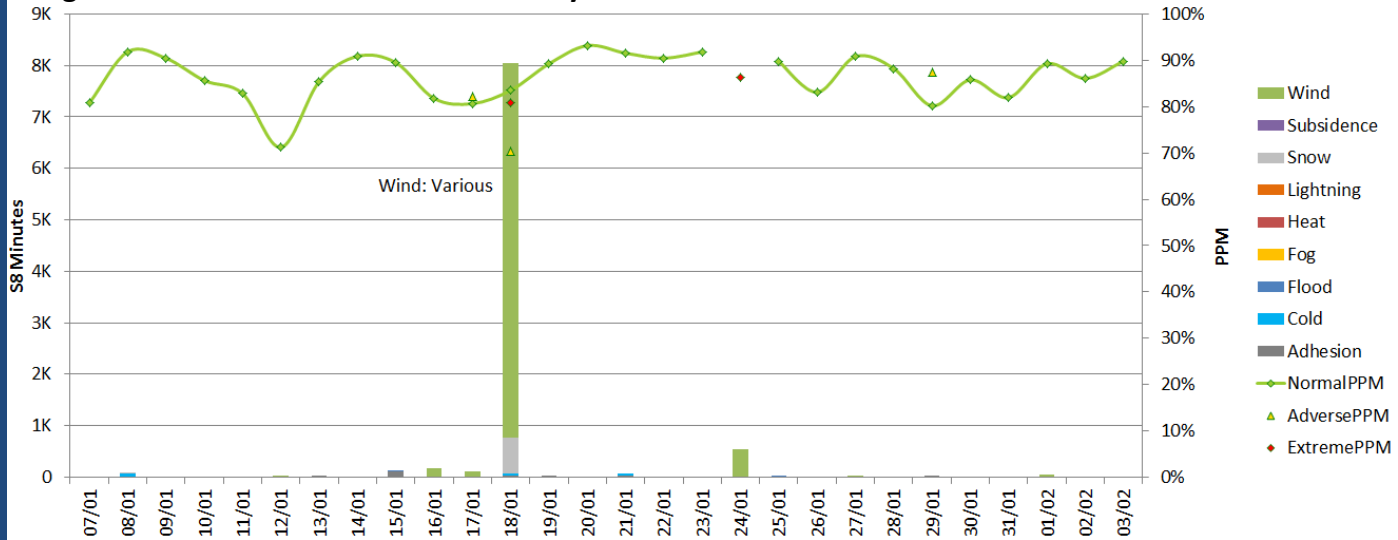
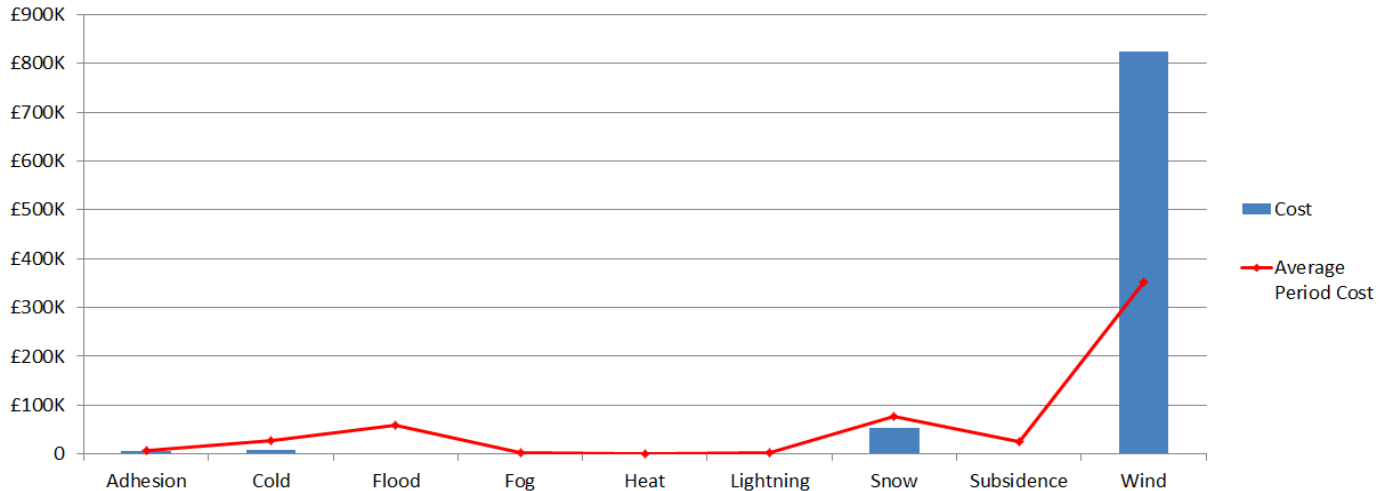


Figure 2 Weather related Schedule 8 cost impact for P11 LNE/EM



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Table 1 Top 10 weather related incidents P11

Date	IncidentDescription	stanoxSection	Route	Weather Category	Delay Minutes	Cost
18/01/2018	SNO BAG ON OHL	Huntingdon : Sandy	LNE	Wind	1723.14	£209,263.73
18/01/2018	KGX HIGH WINDS	London Kings Cross	LNE	Wind	1211	£153,994.93
18/01/2018	CRI OBJECT ON OHL	St Albans City : West Hampstead Thameslink	EAST MIDLANDS	Wind	975	£101,000.61
18/01/2018	SVG PLASTIC SHEET ON OHL	Stevenage	LNE	Wind	934.06	£68,274.65
18/01/2018	HRP TREE ON LINE	Luton : St Albans City	EAST MIDLANDS	Wind	525.5	£65,985.34
18/01/2018	DAR 1071A PTS FLR	Ferryhill Sth. Jn. : Darlington	LNE	Snow	677	£44,092.02
18/01/2018	WEL OBJECT STRIKE	Wellingborough : Sharnbrook Jn.	EAST MIDLANDS	Wind	269.5	£34,968.53
18/01/2018	7X10 STRUCK TREE WIL	Stenson Jn : Clay Mills Jn	EAST MIDLANDS	Wind	509	£28,443.41
18/01/2018	LET TREE ON LINE	Letchworth Garden City	LNE	Wind	353	£24,960.40
18/01/2018	1D14 PLASTIC KGX	London Kings Cross	LNE	Wind	106	£23,115.86



Weather Resilience and Climate Change Adaptation

LNE/EM Route Periodic Performance Report – 2017/2018 P12

Figure 1 provides an overview of the impact of different weather related events by day for period 12 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P12 2018

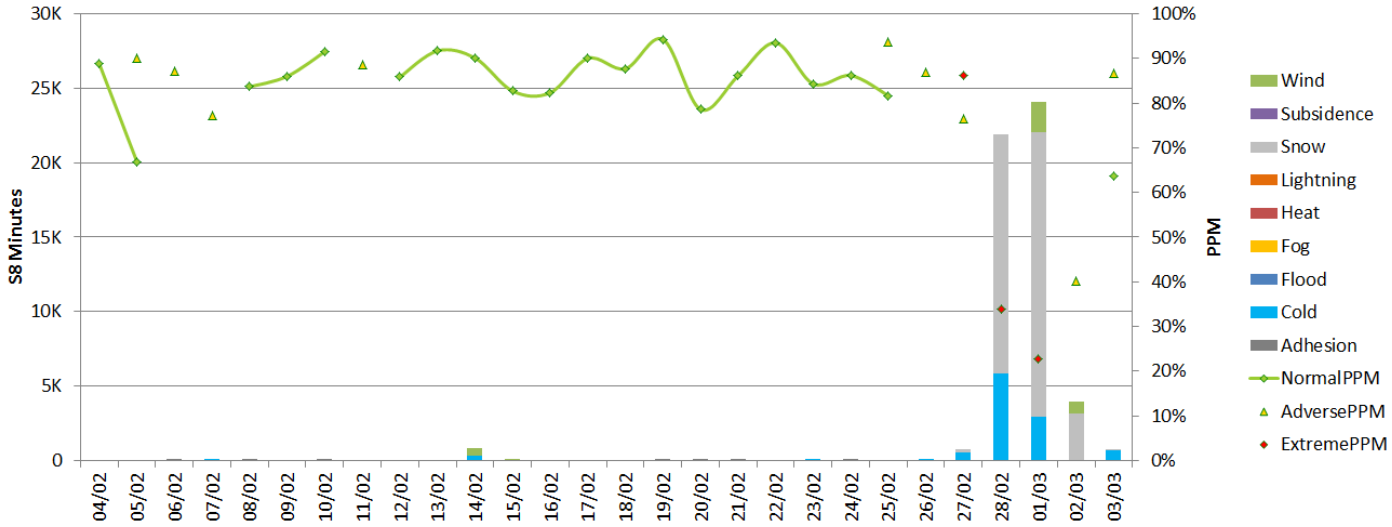
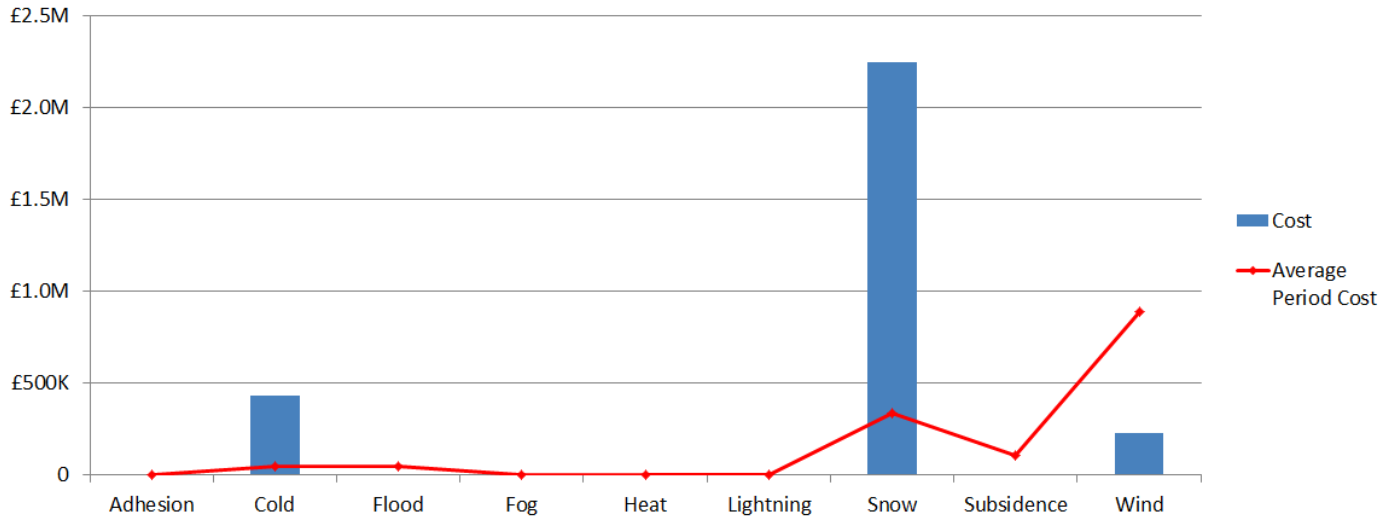


Figure 2 Weather related Schedule 8 cost impact for P12 LNE/EM



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Table 1 Top 10 weather related incidents P12

Date	IncidentDescription	stanoxSection	Route	Weather Category	Delay Minutes	Cost
01/03/2018	CHT SEVERE WEATHER 50 MPH	Alnmouth : Morpeth	LNE	Snow	3754	£764,012.40
01/03/2018	MHR SNOW	Market Harborough	EAST MIDLANDS	Snow	2579.5	£384,011.38
28/02/2018	NCL OHL TRIP	Newcastle	LNE	Cold	1440	£189,168.12
28/02/2018	ALM MPT SNOW	Alnmouth : Morpeth	LNE	Snow	1254	£164,215.80
01/03/2018	FLT BALLOON OHL	Bedford : Flitwick	EAST MIDLANDS	Wind	1198.28	£156,278.02
02/03/2018	MHR SNOW DRIFT	Wigston North Jn : Market Harborough	EAST MIDLANDS	Snow	794.5	£95,368.94
28/02/2018	SEV SNOW GRN	Grangetown (Cleveland)	LNE	Snow	3380	£84,962.95
28/02/2018	TEMPLHJ 2951 PTS FLR SNOW	Temple Hirst Jn.	LNE	Snow	488	£57,186.60
28/02/2018	WEL TPWS	Wellingborough : Sharnbrook Jn.	EAST MIDLANDS	Snow	381.5	£54,479.34
28/02/2018	DORESNJ 4030B PTS FLR	Dore Station Jn	LNE	Snow	880	£49,140.00



Weather Resilience and Climate Change Adaptation

LNE/EM Route Periodic Performance Report – 2017/2018 P13

Figure 1 provides an overview of the impact of different weather related events by day for period 13 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

Figure 1 Weather related PPM and delay minutes for P13 2018 LNE/EM

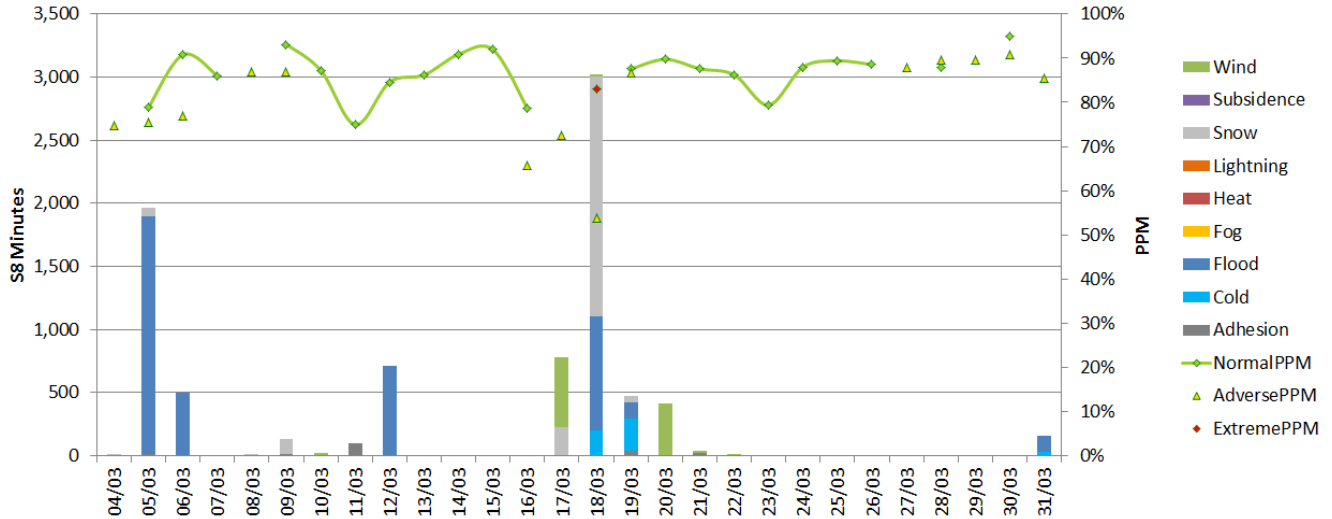
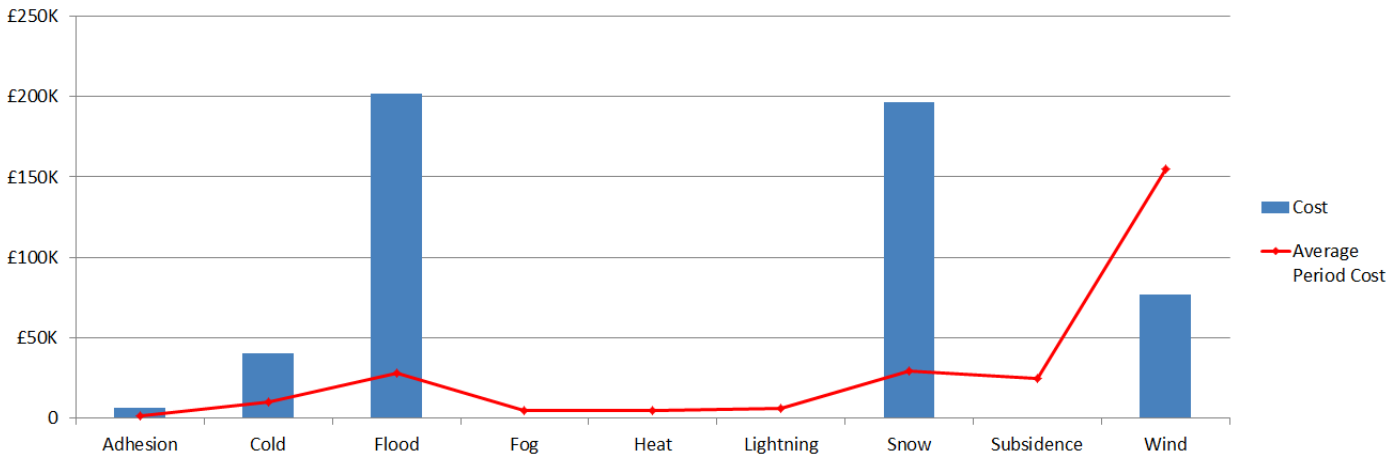


Figure 2 Weather related Schedule 8 cost impact for P13 LNE/EM



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

Table 1 Top 10 weather related incidents P13

Date	IncidentDescription	stanoxSection	Route	Weather Category	Delay Minutes	Cost
18/03/2018	FZW 161 SECTION TRIP	Hare Park Junction : South Kirkby Jn	LNE	Snow	844	£144,429.93
05/03/2018	SUN 905 SECTION TRIP	Sunderland	LNE	Flood	1780	£92,600.14
20/03/2018	NSG BAG ON OHL	Potters Bar : Alexandra Palace	LNE	Wind	409.37	£43,875.00
06/03/2018	BWK BELFORD SEV FLOOD	Berwick-Upon-Tweed : Belford L.C.	LNE	Flood	353	£36,811.32
18/03/2018	LDS BCK TC FLR	Leeds	LNE	Flood	582	£23,315.17
12/03/2018	LNGEDRY FLOODING	Sheet Stores Jn : Derby	EAST MIDLANDS	Flood	496	£20,412.85
17/03/2018	KETTON TREE ON LINE	Helpston Jn. : Manton Jn	EAST MIDLANDS	Wind	377	£18,555.19
18/03/2018	XMJ ROUTE SETTING FLR	Syston East Jn : Manton Jn	EAST MIDLANDS	Cold	100	£14,364.54
18/03/2018	LDS CDC TC FLR	Leeds	LNE	Flood	328	£13,042.54
18/03/2018	SNBKJN TC FLR	Sharnbrook Jn.	EAST MIDLANDS	Cold	67	£10,727.37