

# Appendix 1

## Air Quality Annual Status Summary Report for 2021

### Air Quality Monitoring data

#### 1. Nitrogen Dioxide (NO<sub>2</sub>)

The current UK legal limit is an annual mean of 40µg/m<sup>3</sup>. The World Health Organisation (WHO) published new air quality guidelines in 2021, these have not been adopted in the UK. The WHO recommended annual average guideline for nitrogen dioxide is 10µg/m<sup>3</sup>.

#### Long term continuous analysers

Site	Site type	Annual Mean (µg/m <sup>3</sup> )						
		2015	2016	2017	2018	2019	2020	2021
The Aldgate School	Urban Background	42	42	38	32	33	22	23
Beech St	Roadside	89	85	80	69	62	29	31
Walbrook Wharf	Roadside	98	92	92	87	73	45	46

#### Long term diffusion tube sites

Site	Site type	Annual Mean (µg/m <sup>3</sup> )						
		2015	2016	2017	2018	2019	2020	2021
St Bartholomew's Hospital Courtyard	Urban Background	38	49	63	50	42	33	31
St. Andrew's Church, Queen Victoria St	Roadside	53	56	52	50	41	28	28
St Dunstan's Church, Fleet Street	Roadside	87	81	82	70	57	31	36
Speed House, Barbican Estate	Urban Background	33	35	32	31	28	19	19
Guinness Trust Estate, Mansell St	Roadside	56	51	48	46	39	33	27

### Diffusion tube sites measuring the impact of the Bank on Safety traffic scheme

Site	Annual Mean ( $\mu\text{g}/\text{m}^3$ )					
	2016	2017	2018	2019	2020	2021
Bank 1 - Cannon Street	78	65	50	40	38	37
Bank 2 - Queen Victoria Street	72	59	58	51	35	31
Bank 3 - King Street	52	52	52	47	30	30
Bank 5 - Magistrates Court	66	63	53	56	36	32
Bank 6 - King William Street	76	70	61	61	42	35
Bank 8 - Lombard Street	59	56	56	45	30	28
Bank 10 - Cornhill Bank Junction	71	67	66	57	31	30
Bank 11 - Cornhill-Royal Exchange	61	57	62	41	26	27
Bank 12 - Threadneedle Street	85	69	62	42	31	28
Bank 13 - 31 Old Broad Street	59	57	53	45	29	26
Bank 14 - Wormwood Street	64	61	57	49	33	32
Bank 15 - 3 London Wall	64	54	65	53	35	38
Bank 16 - 81 London Wall	60	59	62	53	38	41
Bank 17 - 55 Moorgate	69	66	66	52	36	36
Bank 18 - 85 Gresham Street	53	54	52	46	30	30
Bank 19 - Lothbury	45	44	45	39	24	24
Bank 20 - Princes Street	78	74	69	49	36	34
Bank 22 - Gracechurch Street /Leadenhall	-	66	62	51	34	36
Bank 23 - Fish Street Hill	-	66	61	43	32	31

### Diffusion tube sites measuring the impact of the Low Emission Neighbourhood

Site	Annual Mean ( $\mu\text{g}/\text{m}^3$ )				
	2017	2018	2019	2020	2021
Len 1 - Giltspur Street	53	43	38	28	27
Len 3 - Beech Street- Near Barbican Station	69	62	50	33	30
Len 4 - Aldersgate	62	57	47	41	35
Len 5 - Viscount Street	40	37	-	24	22
Len 6 - Corner of Whitecross Street / Beech Street	46	42	40	23	25
Len 7 - Silk Street	41	41	36	26	24
Len 8 - Fore Street	41	38	34	25	25
Len 9 - London Wall/ Brewers Hall Gardens	48	49	42	30	36
Len 10 - Aldermanbury	38	37	31	24	23
Len 15 - Fann Street	-	41	36	23	23
Len 16 - Moor Lane	-	39	30	25	23

### Diffusion tube sites – other, including schools and nurseries

Site	Annual Mean ( $\mu\text{g}/\text{m}^3$ )			
	2018	2019	2020	2021
Southwark Bridge	41	35	29	31
London Bridge	37	35	26	26
Liverpool Street	71	52	38	35
Fenchurch Avenue	36	35	26	25
Fetter Lane	56	44	29	30
St Mary at Hill's Churchyard	33	31	21	21
St Pauls Cathedral	41	39	24	24
Whittington Gardens	42	37	26	26
Goodmans Yard	-	44	25	28
Goldman Sachs			24	25
Citigen			30	30
Hatching Dragons Nursery			22	22
Bright Horizons Nursery			24	21
St Pauls Choir School front railings			31	28
CoL Boys School access ramp			21	23
Charterhouse Square School				25

### Diffusion tube sites to support the Transport Strategy

Site	Annual Mean ( $\mu\text{g}/\text{m}^3$ )			
	2018	2019	2020	2021
T2 - Byward Street	67	51	35	40
T3 - Seething Lane	71	57	44	46
T4 - Crosswall	50	44	26	27
T5 - Minories	62	49	36	37
T6 - Stoney Lane	40	39	25	25
T7 - Heneage Lane	42	33	27	25
T9 - 150 Bishopsgate	74	48	36	34
T10 - St Mary Axe	50	42	26	25
T11 - Old Broad Street	40	31	26	27
T12 - Upper Thames Street	48	53	40	39
T13 - Blackfriars Bridge	62	56	41	38
T14 - Victoria Embankment	68	57	38	38
T15 - Fleet Street	62	47	36	30
T16 - Ludgate Hill	61	50	31	31
T17 - Museum of London	66	55	36	35
T18 - London Wall	65	52	39	36
T19 - West Poultry Ave	51	38	30	26
T20 - The Fable	58	51	38	30
T21 - North Old Bailey	73	56	36	43
T22 - Leadenhall St/ Creechurch Lane	-	-	-	28
T 23 - The Gherkin	-	-	-	27
T24 - St Mary's Axe/Bury Court	-	-	-	26

## Diffusion tube sites to support the Beech Street Zero Emissions Street Project

Site	Annual Mean ( $\mu\text{g}/\text{m}^3$ )		
	2019	2020	2021
Aldersgate Street	47	39	39
Bunhill Row/Chiswell Street	40	26	25
Moore Lane/Ropemaker Street	34	29	26
Moorgate	52	32	34
London Wall/ Moorgate	52	36	37
London Wall	49	34	35
Wood Street	29	24	24

## PM<sub>10</sub> Data

The current UK legal limit is an annual mean of  $40\mu\text{g}/\text{m}^3$ . The new World Health Organisation guideline is  $15\mu\text{g}/\text{m}^3$ .

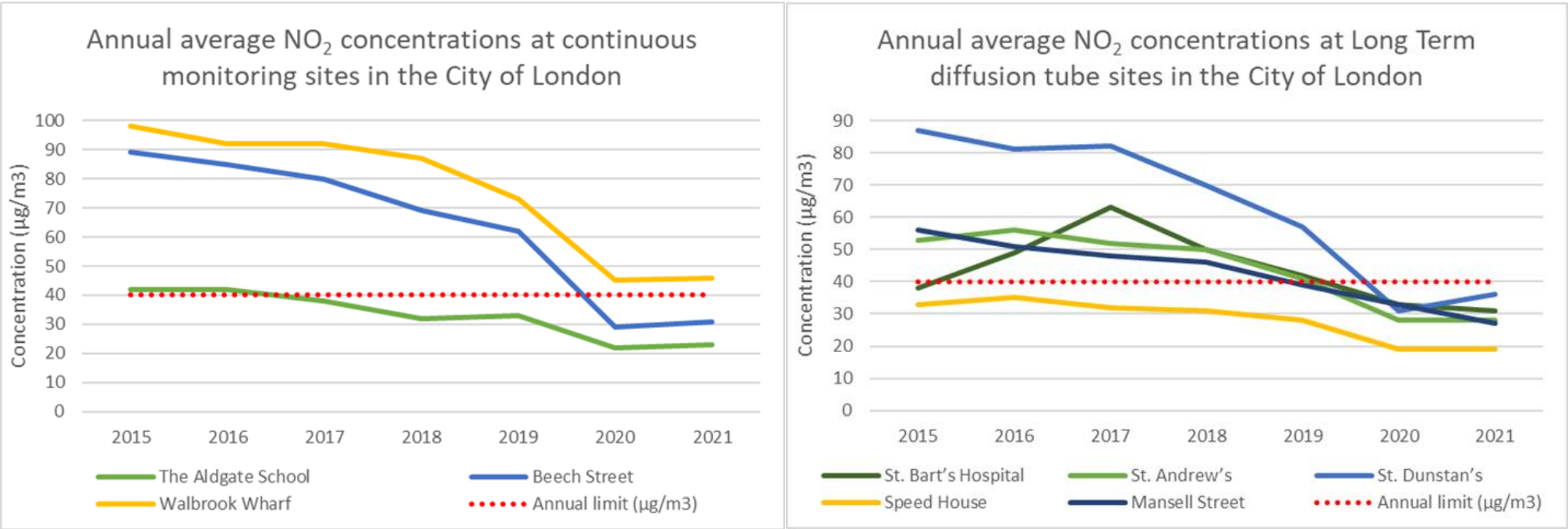
Site	Annual Mean ( $\mu\text{g}/\text{m}^3$ )						
	2015	2016	2017	2018	2019	2020	2021
The Aldgate School	23	24	23	21	19	16	16
Beech St	28	25	23	24	22	18	15
Upper Thames St	41	35	32	32	27	24	19

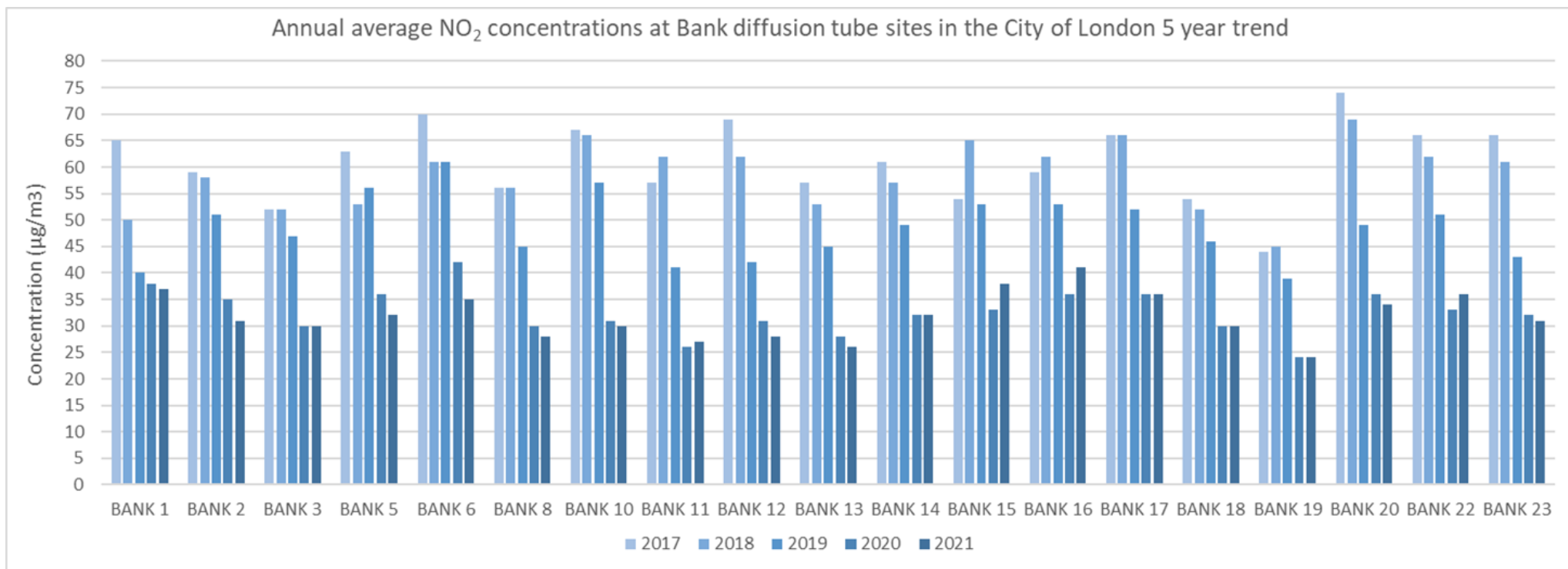
## PM<sub>2.5</sub> Data

The government has proposed an annual average limit of  $10\mu\text{g}/\text{m}^3$  which is likely to be adopted later this year. The new World Health Organisation guideline is  $5\mu\text{g}/\text{m}^3$ .

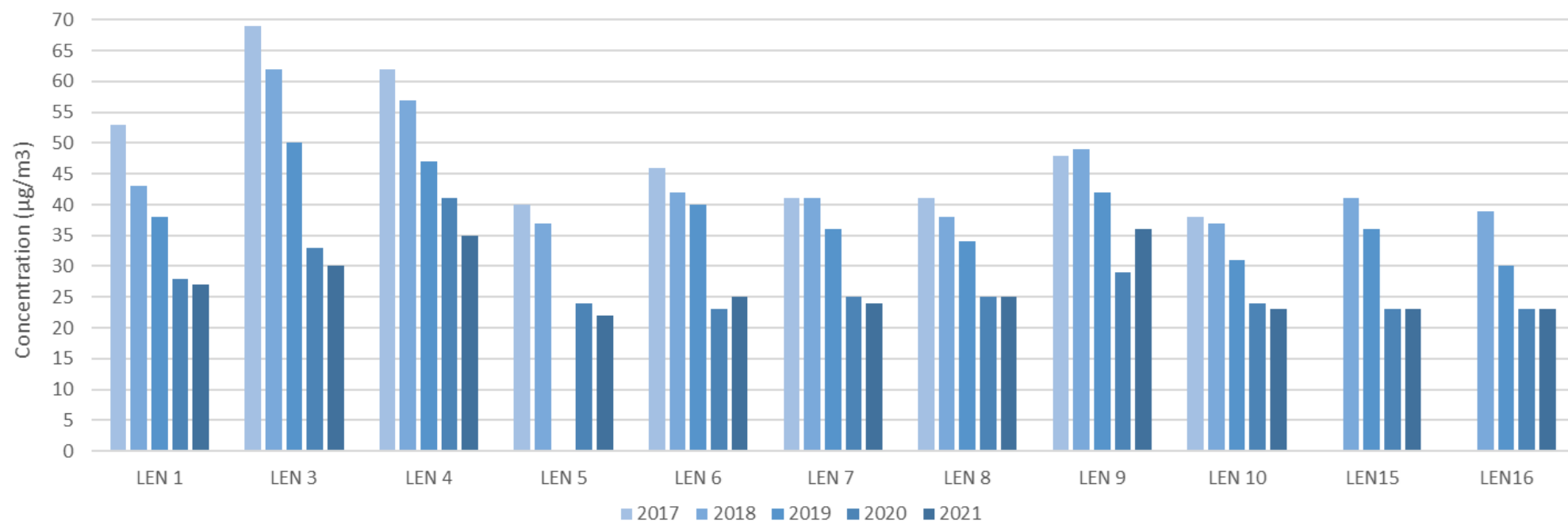
Site	Annual Mean ( $\mu\text{g}/\text{m}^3$ )					
	2016	2017	2018	2019	2020	
Farringdon Street	16	16	16	14	12	12
The Aldgate School	15	14	12	12	12	11

Graphs

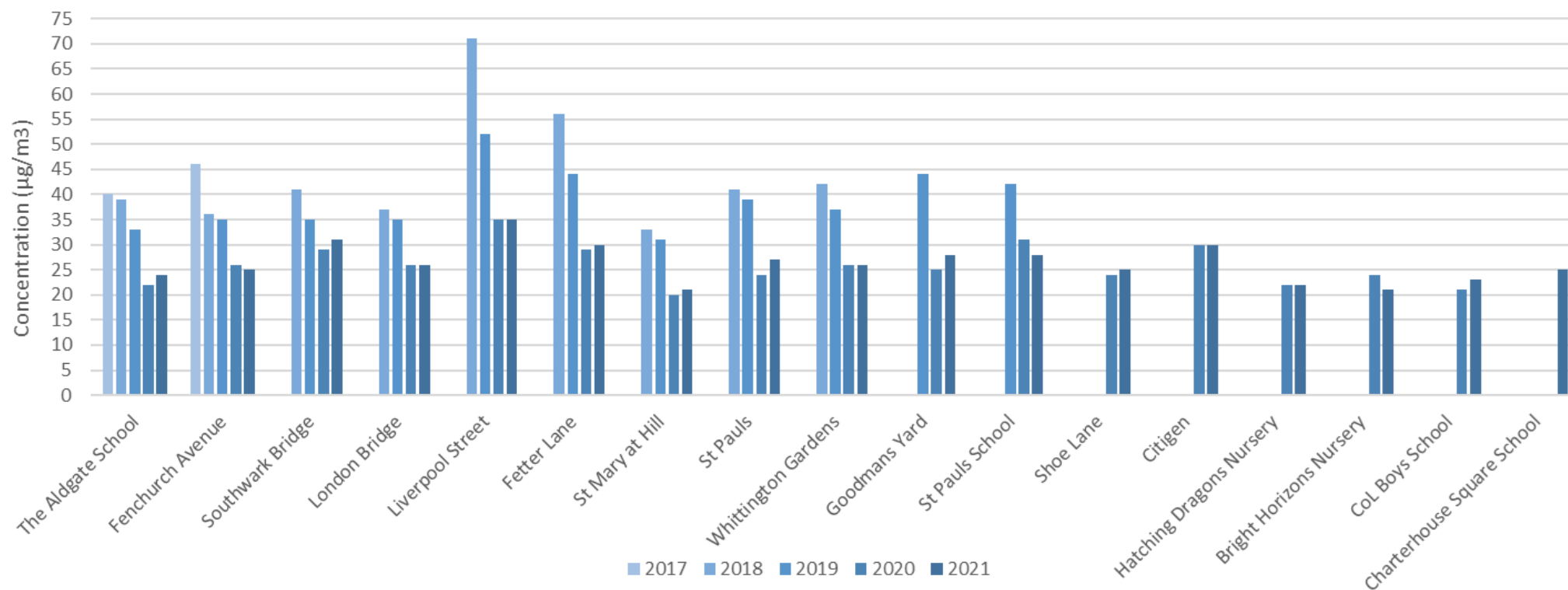




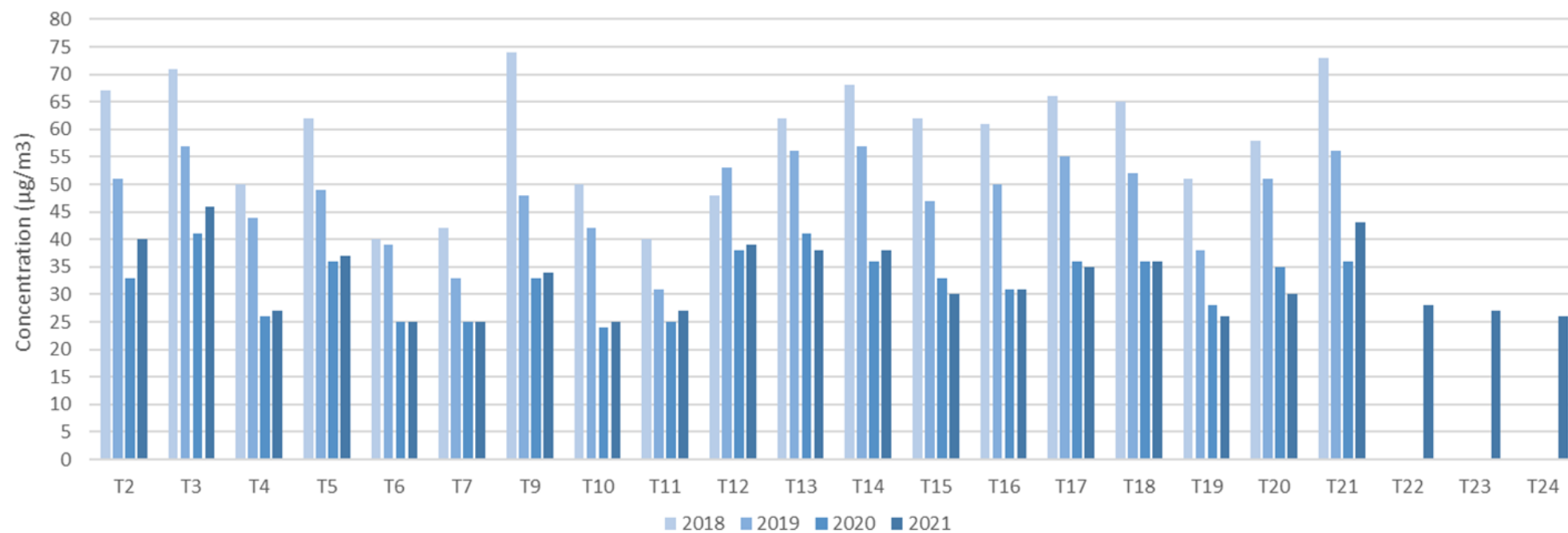
Annual average NO<sub>2</sub> concentrations at LEN diffusion tube sites in the City of London 5 year trend

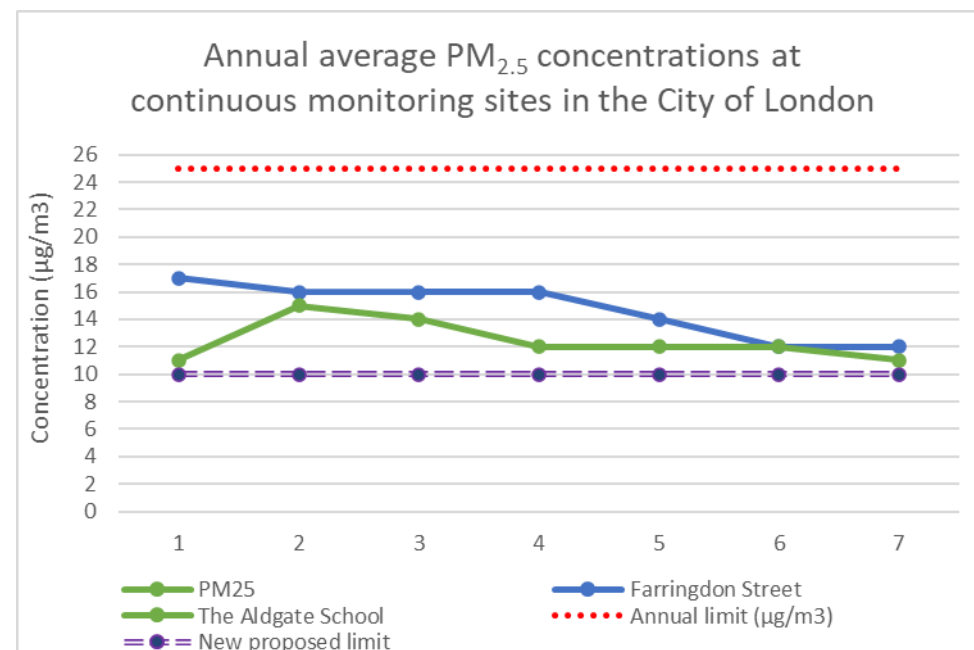
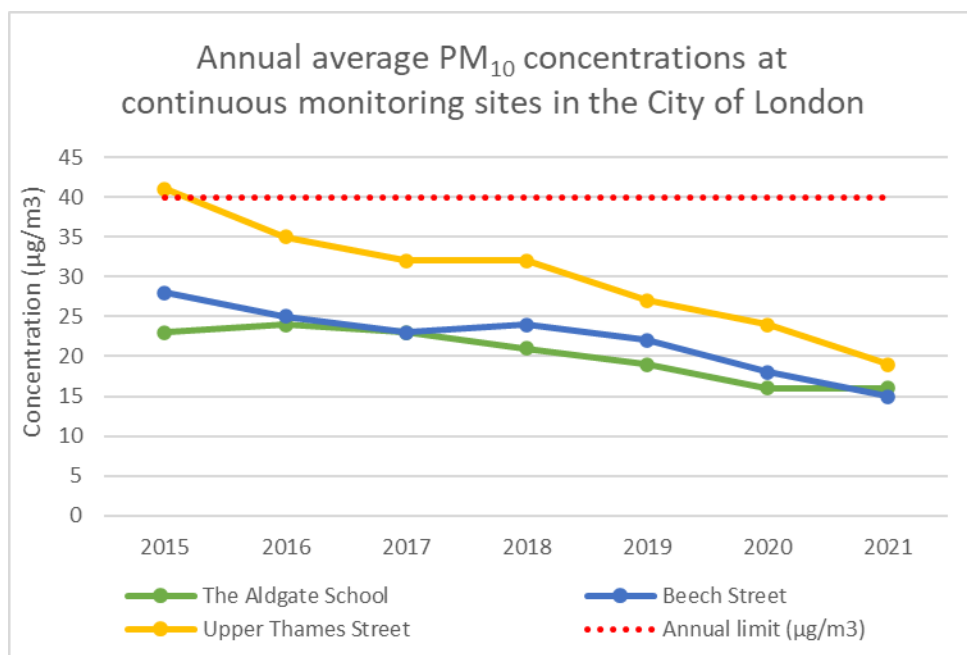


Annual average NO<sub>2</sub> concentrations at additional diffusion tube sites in the City of London



Annual average NO<sub>2</sub> concentrations at Transport Strategy diffusion tube sites in the City of London 4 year trend





## Air quality monitoring locations, 2021

Air quality monitoring locations are reviewed annually. Some core monitoring sites are maintained, and other sites are added and removed according to the needs of research projects, planned programmes and local investigations or concerns.

Locations where monitoring took place during 2021 are shown below. Nitrogen dioxide was measured on some roads in the London Borough of Islington to measure the impact of the zero-emission street pilot. This data isn't included in the Annual Status Report as the report is designed to represent the status of air quality in the Square Mile.

