

Appendix 1

Air Quality Annual Status Summary Report for 2022

Air Quality Monitoring data

1. Nitrogen Dioxide (NO₂)

The current UK legal limit is an annual average (mean) of 40µg/m³. The World Health Organisation (WHO) published new air quality guidelines in 2021, these have not been adopted in the UK. The WHO annual average guideline for nitrogen dioxide is 10µg/m³.

Long term continuous analysers

Site	Site type	Annual Mean (µg/m ³)						
		2016	2017	2018	2019	2020	2021	2022
The Aldgate School	Urban Background	42	38	32	33	22	23	23
Beech St	Roadside	85	80	69	62	29	31	41
Walbrook Wharf	Roadside	92	92	87	73	45	46	52

Long term diffusion tube sites

Site	Site type	Annual Mean (µg/m ³)						
		2016	2017	2018	2019	2020	2021	2022
St Bartholomew's Hospital Courtyard	Urban Background	49	63	50	42	33	31	32
St. Andrew's Church, Queen Victoria St	Roadside	56	52	50	41	28	28	30
St Dunstan's Church, Fleet Street	Roadside	81	82	70	57	31	36	37
Speed House, Barbican Estate	Urban Background	35	32	31	28	19	19	20
Guinness Trust Estate, Mansell St	Roadside	51	48	46	39	33	27	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	2022
Bank 1 - Cannon Street	78	65	50	40	38	37	38
Bank 2 - Queen Victoria Street	72	59	58	51	35	31	39
Bank 3 - King Street	52	52	52	47	30	30	28
Bank 5 - Magistrates Court	66	63	53	56	36	32	33
Bank 6 - King William Street	76	70	61	61	42	35	36
Bank 8 - Lombard Street	59	56	56	45	30	28	28
Bank 10 - Cornhill Bank Junction	71	67	66	57	31	30	32
Bank 11 - Cornhill-Royal Exchange	61	57	62	41	26	27	29
Bank 12 - Threadneedle Street	85	69	62	42	31	28	29
Bank 13 - 31 Old Broad Street	59	57	53	45	28	26	27
Bank 14 - Wormwood Street	64	61	57	49	32	32	36
Bank 15 - 3 London Wall	64	54	65	53	33	38	37
Bank 16 - 81 London Wall	60	59	62	53	36	41	40
Bank 17 - 55 Moorgate	69	66	66	52	36	36	34
Bank 18 - 85 Gresham Street	53	54	52	46	30	30	27
Bank 19 - Lothbury	45	44	45	39	24	24	23
Bank 20 - Princes Street	78	74	69	49	36	34	34
Bank 22 - Gracechurch Street /Leadenhall	-	66	62	51	33	36	42
Bank 23 - Fish Street Hill	-	66	61	43	32	31	35

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

Site	Annual Mean ($\mu\text{g}/\text{m}^3$)					
	2017	2018	2019	2020	2021	2022
Len 1 - Giltspur Street	53	43	38	28	27	29
Len 3 - Beech Street- Near Barbican Station	69	62	50	33	30	37
Len 4 - Aldersgate	62	57	47	41	35	43
Len 5 - Viscount Street	40	37	-	24	22	23

Len 6 - Corner of Whitecross Street / Beech Street	46	42	40	23	25	26
Len 7 - Silk Street	41	41	36	26	24	24
Len 8 - Fore Street	41	38	34	25	25	22
Len 9 - London Wall/ Brewers Hall Gardens	48	49	42	30	36	32
Len 10 - Aldermanbury	38	37	31	24	23	22
Len 15 - Fann Street	-	41	36	23	23	25
Len 16 - Moor Lane	-	39	30	25	23	23

Diffusion tube sites at other locations including schools and nurseries

		Annual Mean ($\mu\text{g}/\text{m}^3$)					
Site		2017	2018	2019	2020	2021	2022
PLA5	Southwark Bridge	-	41	35	29	31	34
PLA6	London Bridge	-	37	35	26	26	25
LS	Liverpool Street	-	71	52	35	35	31
FA	Fenchurch Avenue	46	36	35	26	25	24
FL	Fetter Lane	-	56	44	29	30	31
OS1	St Mary at Hill's Churchyard	-	33	31	20	21	21
OS3	St Pauls cathedral	-	41	39	24	24	26
OS5	Whittington Gardens	-	42	37	26	26	29
OS6	Finsbury Circus	-	-	-	-	25	25
OS7	Christchurch Greyfriars Garden	-	-	-	-	27	27
BS	Brushfield Street	-	-	-	-	23	24
GY	Goodmans Yard	-	-	44	25	28	28
GS	Goldman Sachs, Shoe Lane	-	-	-	24	25	26
CT	Citigen	-	-	-	30	30	30
N1	Hatching Dragons Nursery	-	-	-	22	22	23
N2	Bright Horizons Nursery	-	-	-	24	21	21
SPS2	St Pauls School front railings	-	-	42	31	28	30
CLS2	CoL Boys School access ramp	-	-	-	21	23	24
CHS	Charterhouse Square School	-	-	-	-	25	25
CSG	Cheapside Sunken Garden	-	-	-	-	-	27
TC	Temple Church Courtyard	-	-	-	-	-	21

Diffusion tube supporting the Transport Strategy

Site	Annual Mean ($\mu\text{g}/\text{m}^3$)				
	2018	2019	2020	2021	2022
T2 - Byward Street	67	51	35	40	38
T3 - Seething Lane	71	57	44	46	45
T4 - Crosswall	50	44	26	27	30
T5 - Minories	62	49	36	37	40
T6 - Stoney Lane	40	39	25	25	27

T7 - Heneage Lane	42	33	27	25	26
T9 - 150 Bishopsgate	74	48	36	34	39
T10 - St Mary Axe	50	42	26	25	24
T11 - Old Broad Street	40	31	26	27	24
T12 - Upper Thames Street	48	53	40	39	44
T13 - Blackfriars Bridge	62	56	41	38	37
T14 - Victoria Embankment	68	57	38	38	40
T15 - Fleet Street	62	47	36	30	35
T16 - Ludgate Hill	61	50	31	31	34
T17 - Museum of London	66	55	36	35	37
T18 - London Wall	65	52	39	36	37
T19 - West Poultry Ave	51	38	30	26	27
T20 - The Fable	58	51	38	30	36
T21 - North Old Baily	73	56	36	43	44
T22 - Leadenhall St/ Creechurch Lane	-	-	-	28	29
T 23 - The Gherkin	-	-	-	27	26
T24 - St Mary's Axe/Bury Court	-	-	-	26	26

Diffusion tubes supporting the Beech Street Zero Emissions Street Pilot

Site	Annual Mean ($\mu\text{g}/\text{m}^3$)			
	2019	2020	2021	2022
BS1 Aldersgate Street	47	39	39	44
BS14 Bunhill Row/Chiswell Street	40	26	25	28
BS 16 Moore Lane/Ropemaker Street	34	29	26	25
BS 17 Moorgate	52	32	34	31
BS 18 London Wall/ Moorgate	52	36	37	36
BS 19 London Wall	49	34	35	35
BS 20 Wood Street	29	24	24	21
BS 21 Goswell Road		37	39	43

PM₁₀ Data

The current UK legal limit is an annual average of 40µg/m³. The new World Health Organisation guideline is 15µg/m³.

Site	Annual Mean (µg/m ³)						
	2016	2017	2018	2019	2020	2021	2022
The Aldgate School	24	23	21	19	16	16	16.8
Beech St	25	23	24	22	18	15	17.3
Upper Thames St	35	32	32	27	24	19	-
Bell Wharf Lane							19.5

PM₁₀ monitoring ceased in Upper Thames Street in September 2021 due to issues with the power supply. A new site was set up in May 2022 in Bell Wharf Lane.

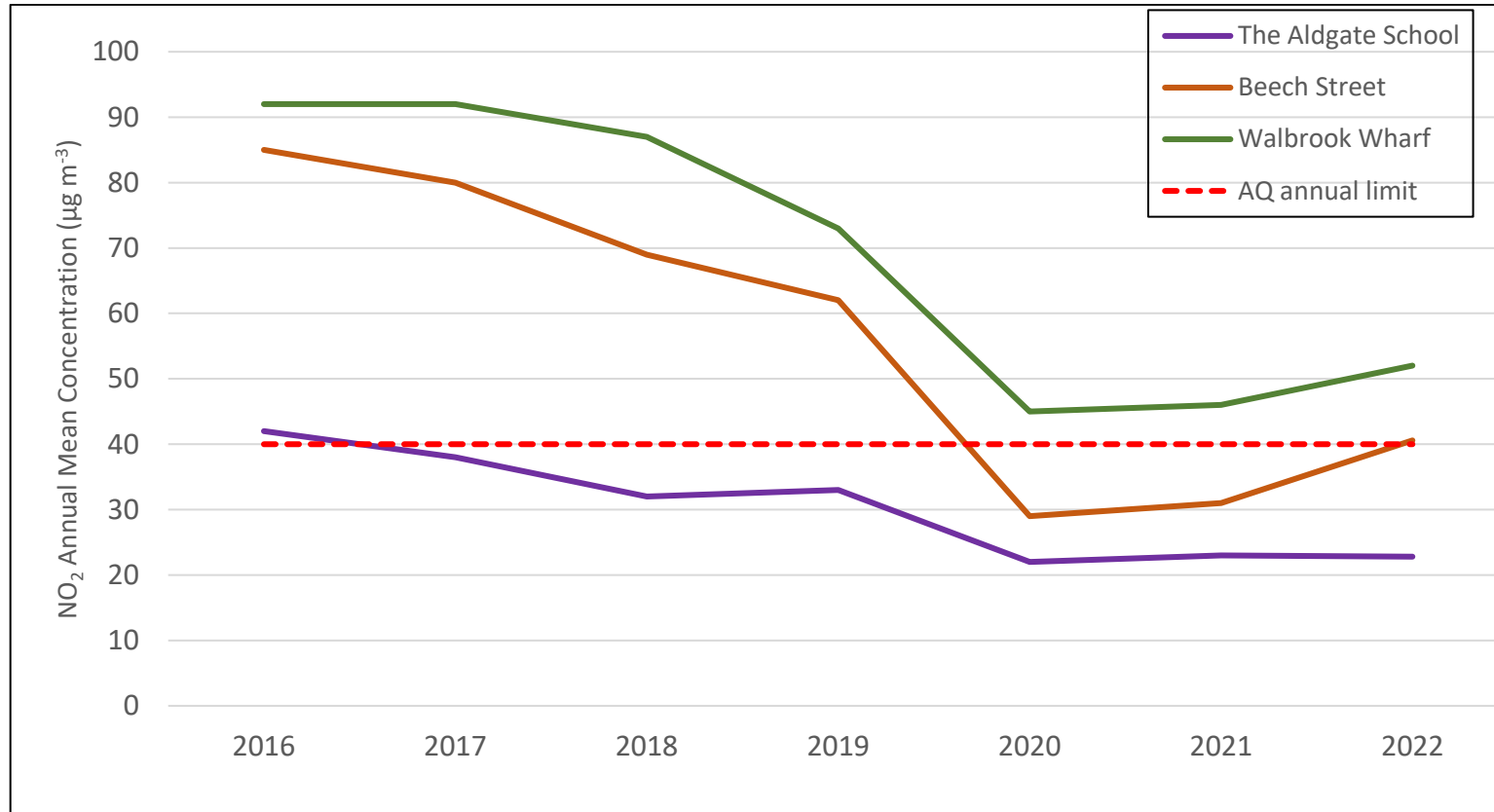
PM_{2.5} Data

The national limit is 10µg/m³ to be met by 2040.

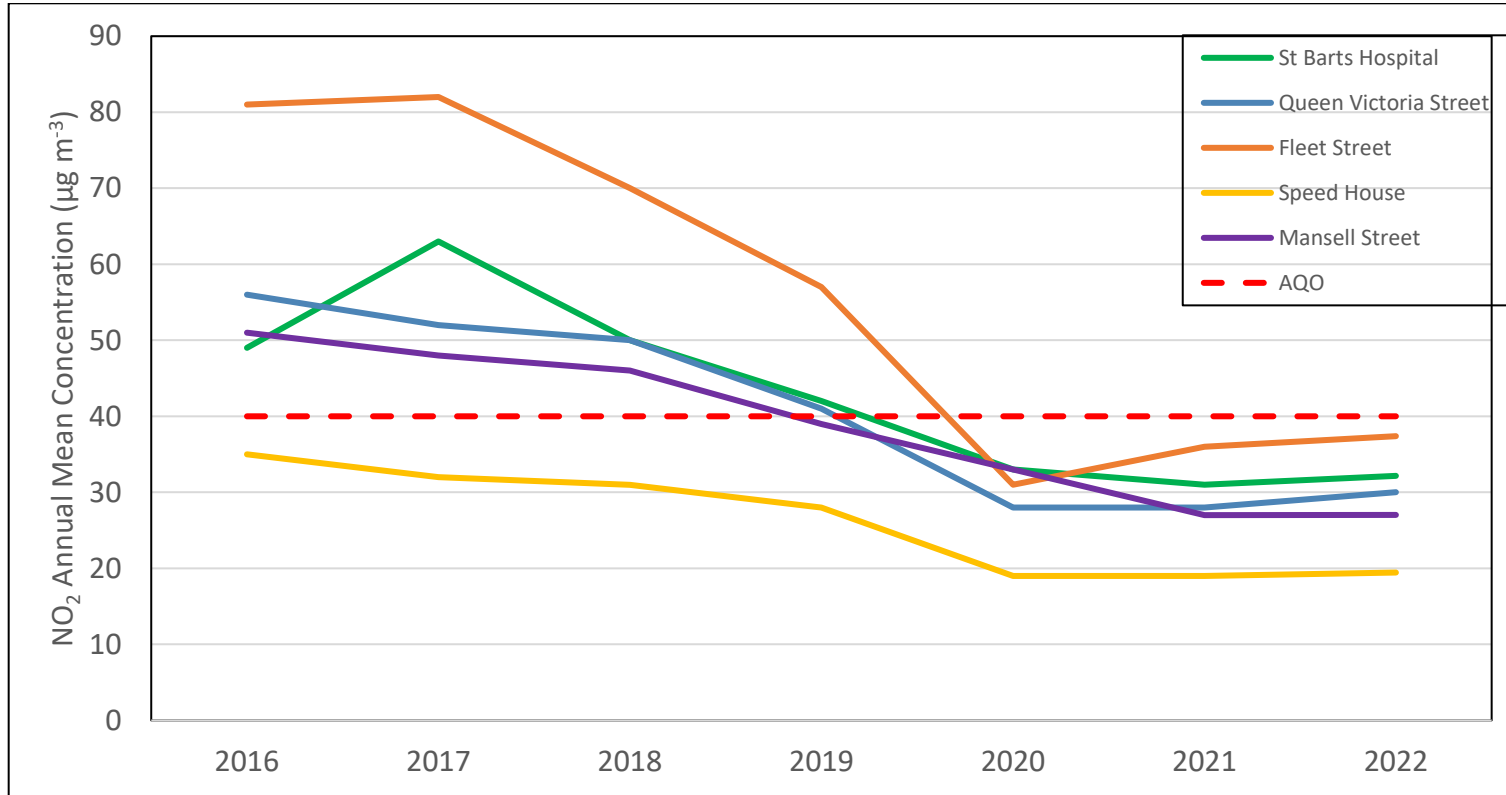
Site	Annual Mean (µg/m ³)						
	2016	2017	2018	2019	2020	2021	2022
Farringdon Street	16	16	16	14	12	12	12
The Aldgate School	15	14	12	12	12	11	12

Graphs and Bar Charts

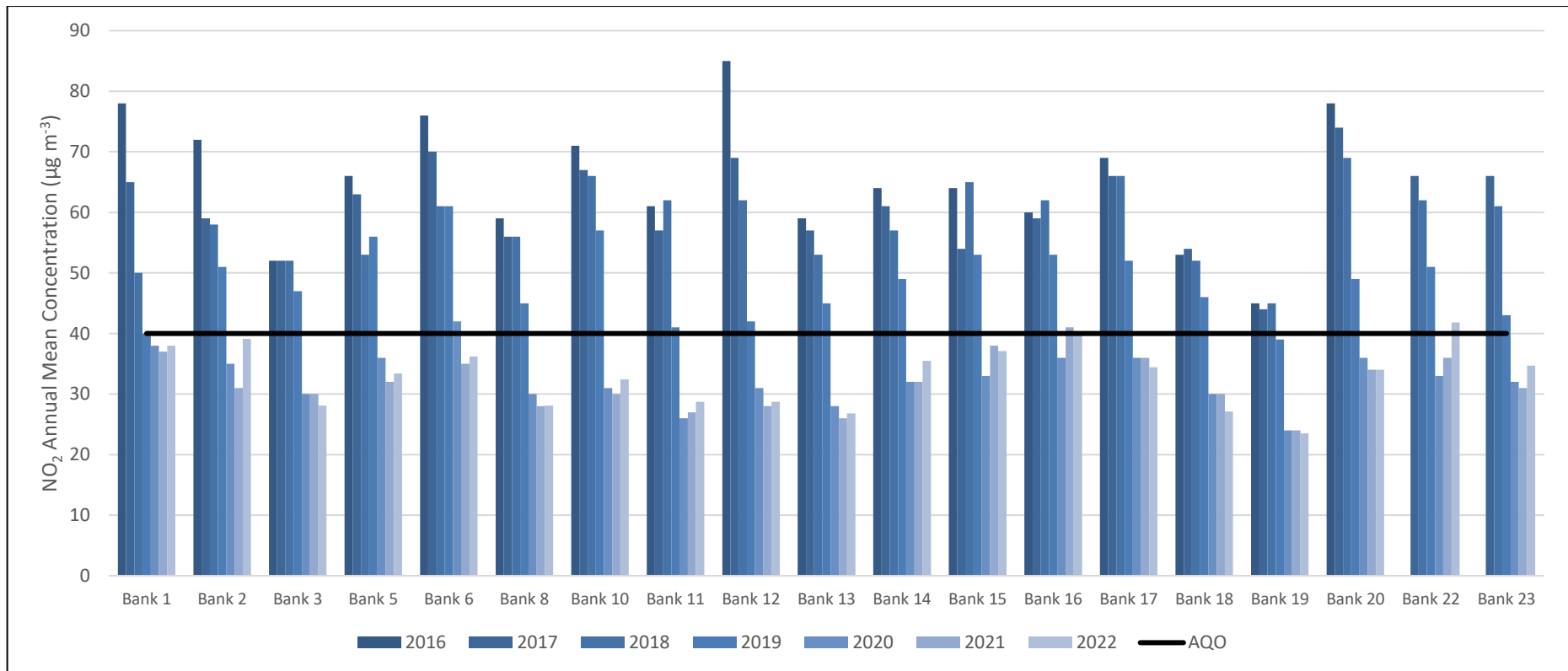
Annual Mean NO₂: Continuous Monitoring Sites



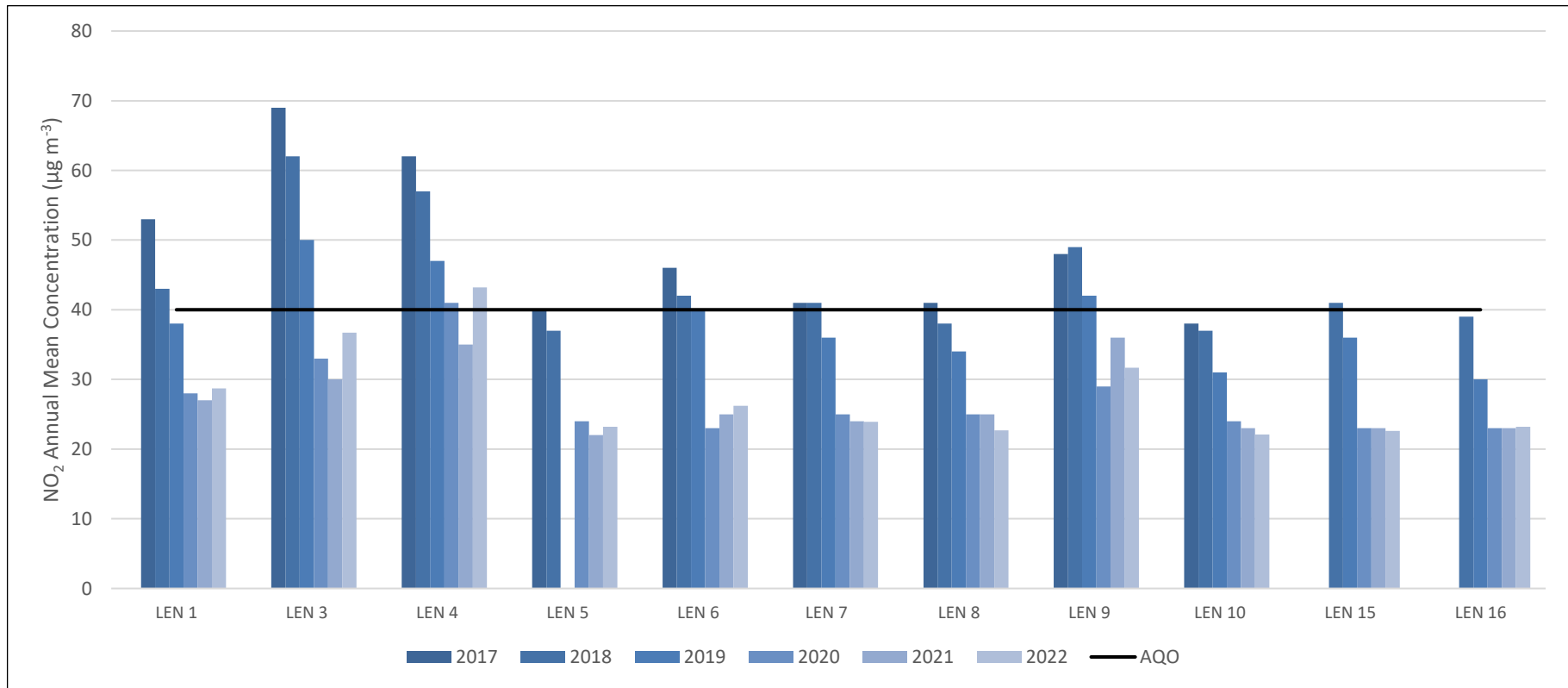
Annual Mean NO₂: Long Term Diffusion Tube Sites



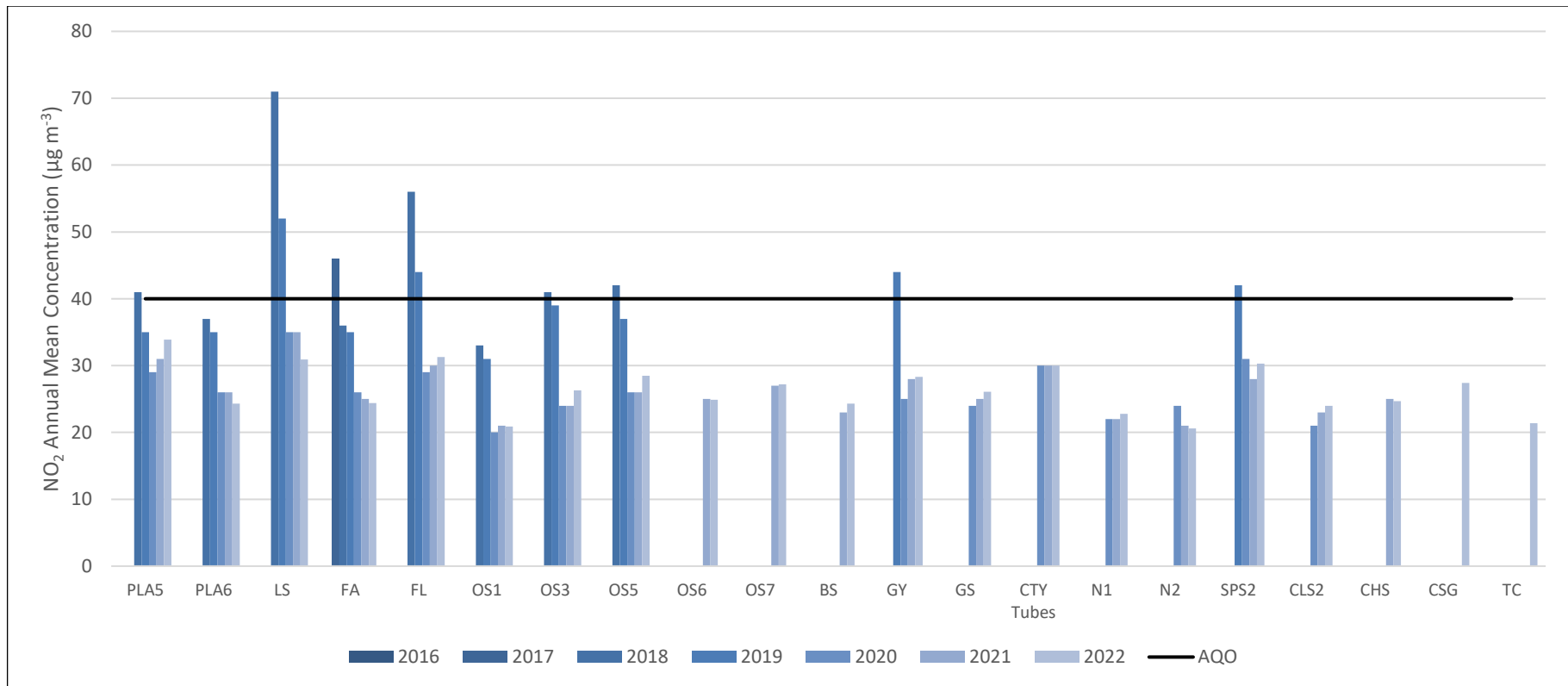
Annual Mean NO₂: Bank Area Diffusion Tubes



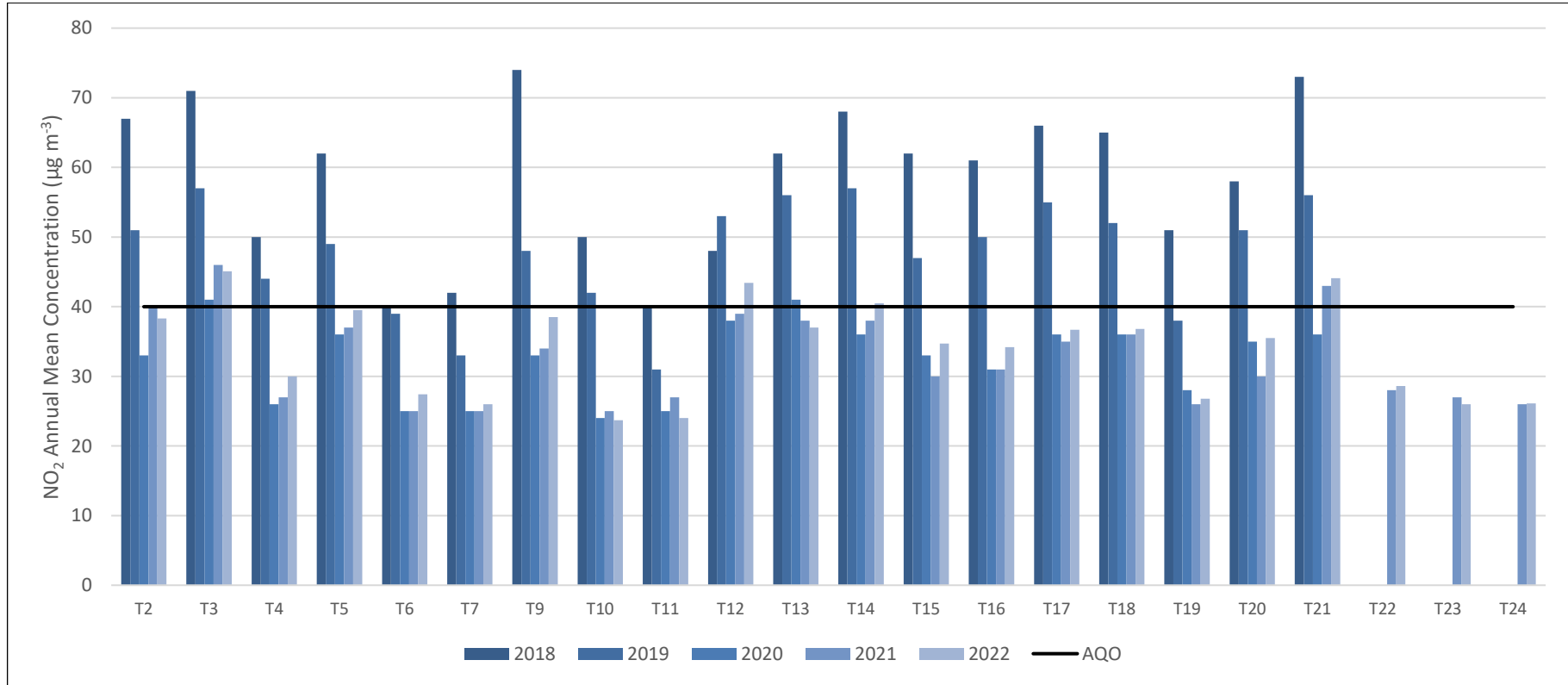
Annual Mean NO₂: LEN Area Diffusion Tubes



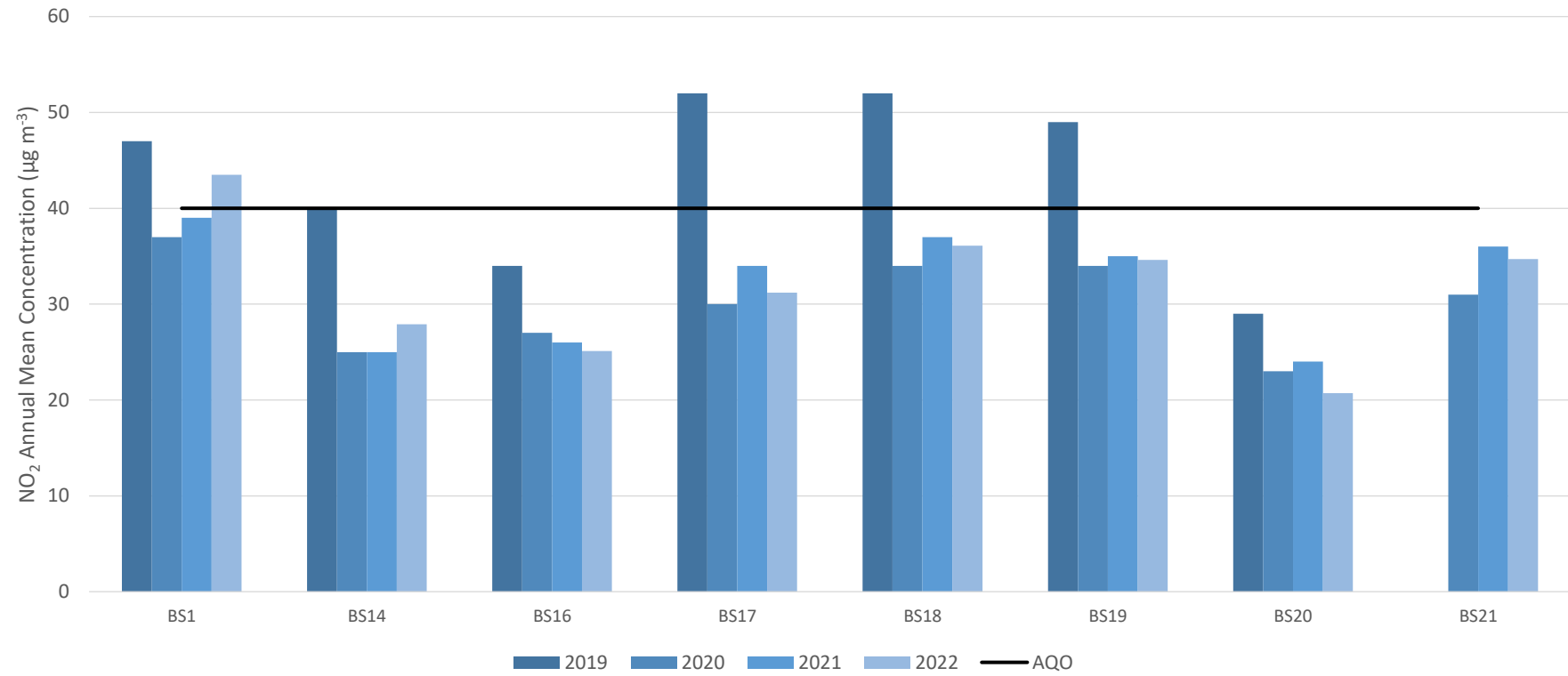
Annual Mean NO₂: City Area Diffusion Tubes



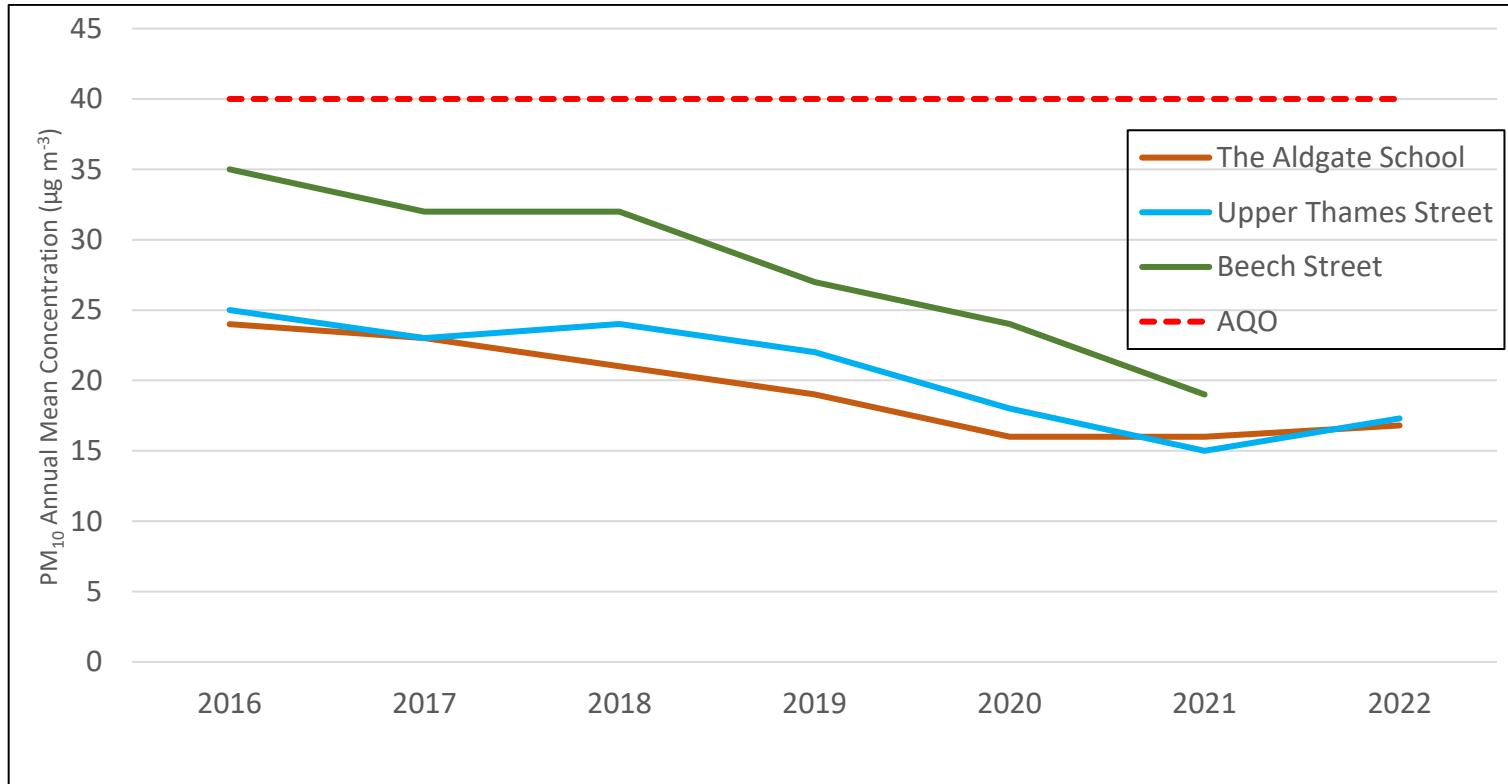
Annual Mean NO₂: Transport Strategy Diffusion Tubes



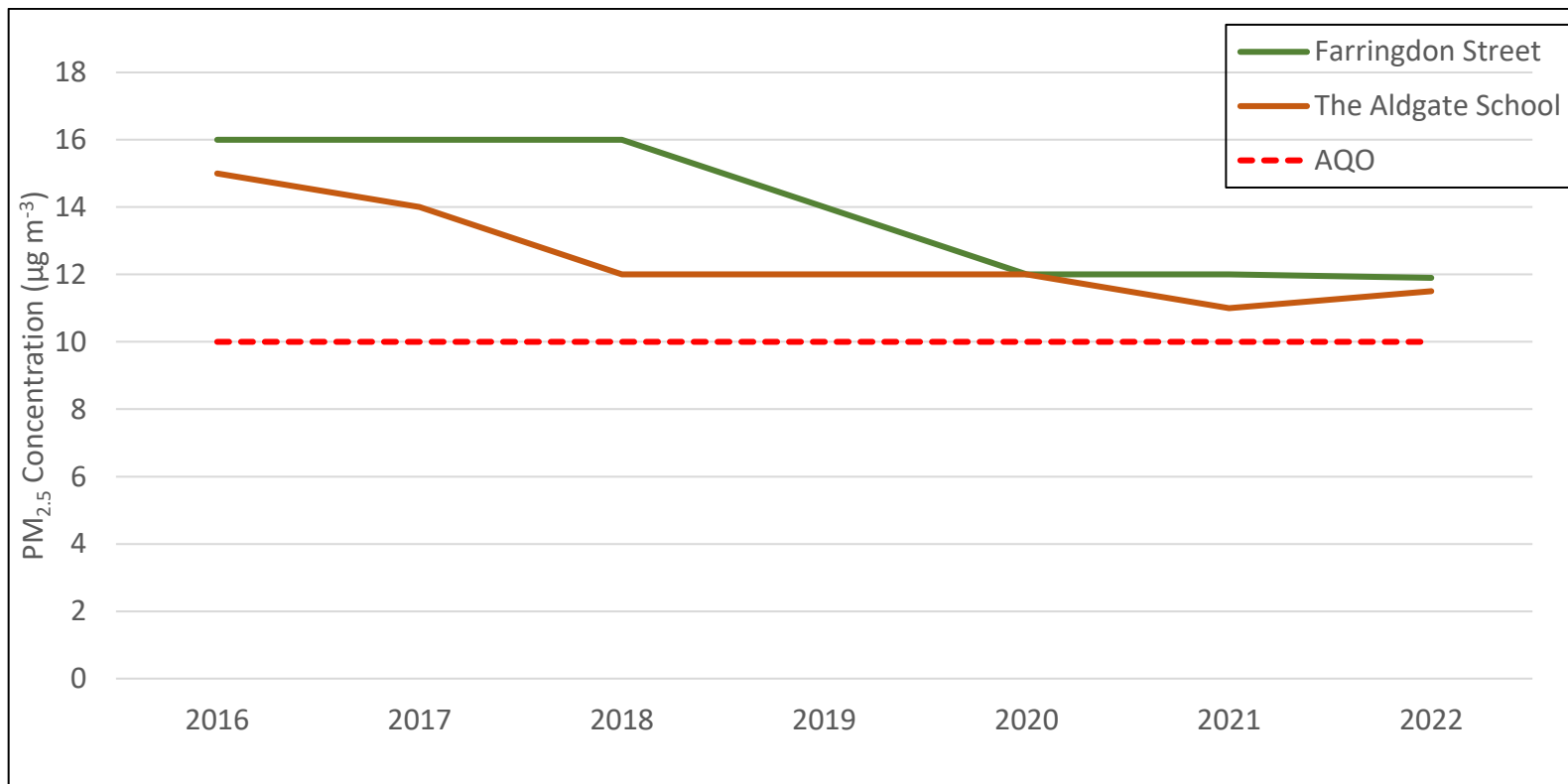
Annual mean NO₂: Beech Street Pilot Diffusion Tubes



Annual Mean PM₁₀



Annual Mean PM_{2.5}



Air quality monitoring locations, 2022

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.

The maps below show locations where monitoring took place during 2022 using diffusion tubes, and the more accurate automatic monitoring equipment

