

BUS FLEET AUDIT

31 March 2021

This is an audit of the London Buses contracted fleet using data collated on 31 March 2021. This is the 26th audit and the report represents the results and makes comparisons with previous audits.

1. Summary

This year's fleet size of 9,068 buses represents a reduction of 34 buses in comparison to last fleet audit total on 31 March 2020 of 9,102. The number of vehicles in the fleet will change from time to time, as new vehicles enter service and the vehicles they are replacing are decommissioned. The fleet size also varies in response to service changes.

The fleet total includes 485 Electric buses and 3,884 Hybrid buses (including 1,000 new Routemasters). There are no non-low floor vehicles in the fleet.

The fleet as at 31 March 2021 included a number of additional vehicles retained in response to meeting Government guidelines on Social Distancing alongside a requirement from the DfE for the provision of Extra Schools Transport in Autumn 2020 through to Summer 2021 during the Covid-19 pandemic.

2. London Bus Fleet by Age and Type as at 31 March 2021

The current data at 31 March 2021 shows the fleet size and the quantity registered in each year by type.

OVERALL FLEET AGE PROFILE AS AT 31 MARCH 2021								
Year	DD	SD	NRM	Diesel	Electric	Fuel Cell	Hybrid	Total
2005	1	-	-	1	-	-	-	1
2006	11	1	-	12	-	-	-	12
2007	36	34	-	70	-	-	-	70
2008	96	75	-	171	-	-	-	171
2009	511	227	-	732	-	-	6	738
2010	462	172	-	595	-	-	39	634
2011	583	318	-	810	-	-	91	901
2012	660	213	8	721	-	-	144	873
2013	471	92	111	293	-	-	159	563
2014	490	79	237	82	6	-	244	569
2015	631	187	307	200	9	-	302	818
2016	819	251	227	270	56	-	517	1070
2017	692	348	109	342	18	2	569	1040
2018	481	272	1	206	66	-	480	753
2019	270	211	-	179	99	-	203	481
2020	246	66	-	13	169	-	130	312
2021	29	33	-	-	62	-	-	62
TOTAL	6489	2579	1000	4697	485	2	2884	9068

3. London Bus Fleet by Type – 31 March 2011 to 31 March 2021

Year as at 31 March		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
TOTAL		8546	8743	8717	8765	8977	9186	9616	9396	9142	9102	9068
Single deck	Diesel	2930	2661	2608	2606	2662	2617	2612	2587	2435	2406	2309
	Hybrid	27	33	28	23	23	18	18	13	-	-	-
	Fuel Cell	5	5	5	8	8	8	8	10	10	2	2
	Electric	-	-	-	2	8	17	66	91	150	201	268
	TOTAL	2962	2699	2641	2639	2701	2660	2704	2701	2595	2609	2579
Double deck	Diesel	5505	5806	5716	5315	5045	4804	4390	3463	2873	2605	2388
	Hybrid	79	233	352	643	799	981	1564	2227	2669	2773	2884
	Hybrid NRM	-	5	8	168	432	736	953	1000	1000	1000	1000
	Electric	-	-	-	-	-	5	5	5	5	115	217
	TOTAL	5584	6044	6076	6126	6276	6526	6912	6695	6547	6493	6489

4. Fleet Emission Standards Changes as at 31 March from 2011 to 2021

Emissions as at 31 March	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Euro VI	-	-	2	14	449	1194	2300	3383	4045	4274	4409
Euro VI upgraded from EEV	-	-	-	-	-	-	-	135	225	378	396
Euro VI upgraded from Euro V	-	-	-	-	-	-	-	752	2296	2846	3028
Euro VI upgraded to Euro IV	-	-	-	-	-	-	-	176	358	688	672
EEV	490	463	858	853	616	631	564	309	194	19	0
Euro V	928	2263	2660	3151	3687	3633	3585	2611	848	259	9***
Euro IV	1754	1989	1771	1683	1625	1628	1627	1256	861	288	57***
Euro IV upgraded from Euro III	3953	3246	3116	2934	2534	2060	1451	658	140	25	10***
Euro II	1425	777	305	121	50	10	10	10	10	7	0
Fuel Cell	5	5	5	8	8	8	8	10	10	2	2
Electric	-	-	-	2	8	22	71	96	155	316	485
Fleet Total	8550	8738	8712	8765	8977	9186	9616	9396	9142	9102	9068
Hybrid (excl NRM)	106	266	388	662	822	999	1582	2240	2669	2773	2884
NRM Hybrid	-	1	8	168	432	736	953	1000	1000	1000	1000

As at 31 March 2021, a total of 8,992 buses in the fleet are to the equivalent of Euro VI emissions standard or better. This represents a total of 99.16% of the fleet. The fleet included 487 Zero Emission buses which is 5.37% of the total fleet.

*** All non Euro VI or Zero Emission vehicles as at this date were restricted to extra peak services required for schoolchildren required the DfE during the Covid-19 pandemic

5. Fleet Emissions by Bus Type and Operator as at 31 March 2021

Fuel	Body Type	EU Standard	31/03/21	Abellio	Arriva Group	Ensignbus	Go Ahead Group	HCT Group	Metroline	RATP	Stagecoach	Sullivan Buses	Tower Transit	University Bus
Diesel / Hybrid	Single deck	Euro IV upgraded from Euro III	1	-	-	-	-	-	1	-	-	-	-	-
		Euro IV	36	1	-	-	22	-	-	13	-	-	-	-
		Euro V	9	4	-	-	-	3	-	-	2	-	-	-
		Euro VI upgraded from Euro IV	265	-	16	-	48	2	125	40	30	-	3	1
		Euro VI upgraded from Euro V	797	81	82	-	253	29	120	105	77	6	44	-
		Euro VI upgraded from EEV	26	-	-	-	19	-	-	7	-	-	-	-
		Euro VI	1175	173	88	3	239	78	92	278	151	17	51	5
	Double deck	Euro IV upgraded from Euro III	9	-	-	-	1	-	-	8	-	-	-	-
		Euro IV	21	1	1	-	2	-	-	3	14	-	-	-
		Euro VI upgraded from Euro IV	407	9	92	-	120	-	45	64	55	18	4	-
		Euro VI upgraded from Euro V	1487	96	483	5	400	-	105	84	257	25	32	-
		Euro VI upgraded from Euro VI	348	-	10	-	-	-	230	72	-	-	36	-
		Euro VI	116	-	41	2	3	1	-	5	52	12	-	-
		Euro VI upgraded from Euro V	438	43	152	-	73	1	72	71	26	-	-	-
		Euro VI upgraded from EEV	22	-	-	-	-	-	-	-	-	-	-	22
Euro VI	2424	228	325	-	599	49	524	186	406	-	107	-		
NRM Hybrid	Double deck	Euro VI upgraded from Euro V	306	51	100	-	37	-	34	50	34	-	-	-
		Euro VI	694	110	187	-	243	-	94	18	42	-	-	-
Fuel cell	Single deck	Zero Emission	2	-	-	-	-	-	-	-	-	-	2	-
Electric	Single deck	Zero Emission	268	34	13	-	157	-	23	36	5	-	-	-
	Double deck	Zero Emission	217	-	-	-	49	-	67	29	47	-	20	5
Total			9068	831	1590	10	2265	163	1532	1069	1198	78	321	11

^ Ensignbus are included for Fleet profile completeness as they are contracted to operate additional school journeys during the Covid-19 pandemic but do not otherwise operate Contracted London Bus Network routes.

6. Operator Fleet Changes

The data as at 31 March from 2011 to 2021 details the individual bus operator fleet size by vehicle quantity, the respective % of the overall network fleet and fleet average age.

Fleet size as at 31 March											
OPERATOR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Abellio	503	530	568	596	661	738	708	745	720	798	831
Arriva Group	1848	1737	1747	1733	1652	1634	1768	1706	1652	1648	1590
<i>Ensignbus</i>	-	-	-	-	-	-	-	-	-	-	10
Go Ahead Group	1405	1753	1720	1750	2298	2251	2370	2354	2141	2254	2265
Metrobus	322	331	324	315	315						
HCT Group	73	83	83	86	180	92	152	129	152	157	163
Metroline	1133	1163	1099	1606	1495	1680	1735	1678	1729	1602	1532
RATP	922	948	933	960	1056	1047	1066	1076	1112	1086	1069
Quality Line	65	71	82	84	89	89					
Stagecoach	1238	1160	1147	1198	1062	1287	1290	1232	1176	1102	1198
Sullivan Buses	-	6	17	22	22	26	43	64	68	69	78
Tower Transit	-	-	-	415	462	426	479	407	388	381	321
University Bus	-	-	-	-	-	5	5	5	4	5	11
Total	8546	8743	8717	8765	8977	9186	9616	9396	9142	9102	9068
Less than 10 years	7834	7715	7619	6952	6651	7384	8186	8332	8163	7590	7261
% of Total fleet as at 31 March											
OPERATOR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Abellio	5.89	6.06	6.52	6.80	7.36	8.03	7.36	7.93	7.88	8.77	9.16
Arriva Group	21.62	19.87	20.04	19.77	18.40	17.79	18.39	18.17	18.07	18.11	17.53
<i>Ensignbus</i>	-	-	-	-	-	-	-	-	-	-	0.11
Go Ahead Group	16.44	20.05	19.73	19.97	25.60	24.50	24.65	25.07	23.42	24.76	24.98
Metrobus	3.77	3.79	3.72	3.60	3.60						
HCT Group	0.85	0.95	0.95	0.98	2.01	1.00	1.58	1.37	1.66	1.72	1.80
Metroline	13.26	13.30	12.61	18.32	16.65	18.29	18.04	17.86	18.91	17.60	16.89
RATP	10.78	10.84	10.71	10.95	12.34	11.40	11.09	11.43	12.16	11.93	11.79
Quality Line	0.76	0.81	0.94	0.96	0.99	0.99					
Stagecoach	14.49	13.27	13.16	13.67	11.83	14.01	13.42	13.11	12.86	12.11	13.21
Sullivan Buses	-	0.07	0.20	0.25	0.25	0.28	0.45	0.68	0.74	0.76	0.86
Tower Transit	-	-	-	4.73	5.15	4.64	4.98	4.33	4.24	4.19	3.54
University Bus	-	-	-	-	-	0.05	0.05	0.05	0.04	0.05	0.12
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Less than 10 years	91.67	88.24	87.40	79.32	74.09	80.38	85.13	88.70	89.29	83.38	80.07
Average Age of Fleet as at 31 March (years)											
OPERATOR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Abellio	5.10	5.70	5.60	6.30	5.94	5.96	5.24	4.64	4.98	5.57	6.12
Arriva Group	6.50	6.50	6.50	7.43	6.39	6.17	5.93	5.28	6.07	6.76	7.40
<i>Ensignbus</i>	-	-	-	-	-	-	-	-	-	-	6.56
Go Ahead Group	5.90	5.10	5.70	6.40	7.16	6.83	5.78	5.63	5.54	6.06	6.65
Metrobus	5.40	5.80	5.80	6.70	6.70						
HCT Group	5.40	5.70	5.20	6.20	7.72	7.00	2.36	2.67	3.20	4.26	5.22
Metroline	6.50	6.60	5.70	5.60	6.26	6.41	6.31	6.16	6.09	6.08	6.83
RATP	5.75	5.25	5.60	5.60	6.63	5.73	6.82	6.73	5.62	5.91	6.64
Quality Line	4.90	5.90	4.50	4.50	4.07	4.07					
Stagecoach	7.50	6.80	7.10	7.10	6.54	6.73	6.43	6.50	5.91	6.19	6.26
Sullivan Buses	-	0.30	6.50	8.00	9.05	9.42	8.31	5.63	6.09	7.04	8.31
Tower Transit	-	-	-	5.40	6.10	5.38	5.41	5.48	5.27	6.18	6.34
University Bus	-	-	-	-	-	2.60	3.37	4.43	3.75	6.39	6.19
Total	6.20	5.80	5.90	6.20	6.41	6.47	6.00	5.77	5.70	6.11	6.69

7. Single Deck Diesel Vehicles – Breakdown by Year and Length

The single deck fleet profile as at 31 March 2021 shows the quantity by year registered and respective vehicle lengths. This highlights the wide range of variation of single-deck vehicles required to meet our network requirements.

Year	Single Deck Bus age and length profile at 31 March 2021							Total
	7.8m – 7.9m	8.8m- 9.0m	9.3m- 9.7m	9.9m- 10.2m	10.4m- 10.5m	10.6m- 10.9m	11.5m- 12.0m	
2006	1							1
2007		4		19		11		34
2008		15		56		4		75
2009		5		138	50	15	19	227
2010	7		13	141		11		172
2011		34	33	163		81	7	318
2012		24	57	78		54		213
2013		27	1	9		55		92
2014		20	8	13		32		73
2015		73	9	3	8	69	16	178
2016		65	53	6		76		200
2017		66	60		37	165		328
2018	6	15	20		14	144	7	206
2019		32	19		32	70	26	179
2020		13						13
Total	14	393	273	626	141	787	75	2309