

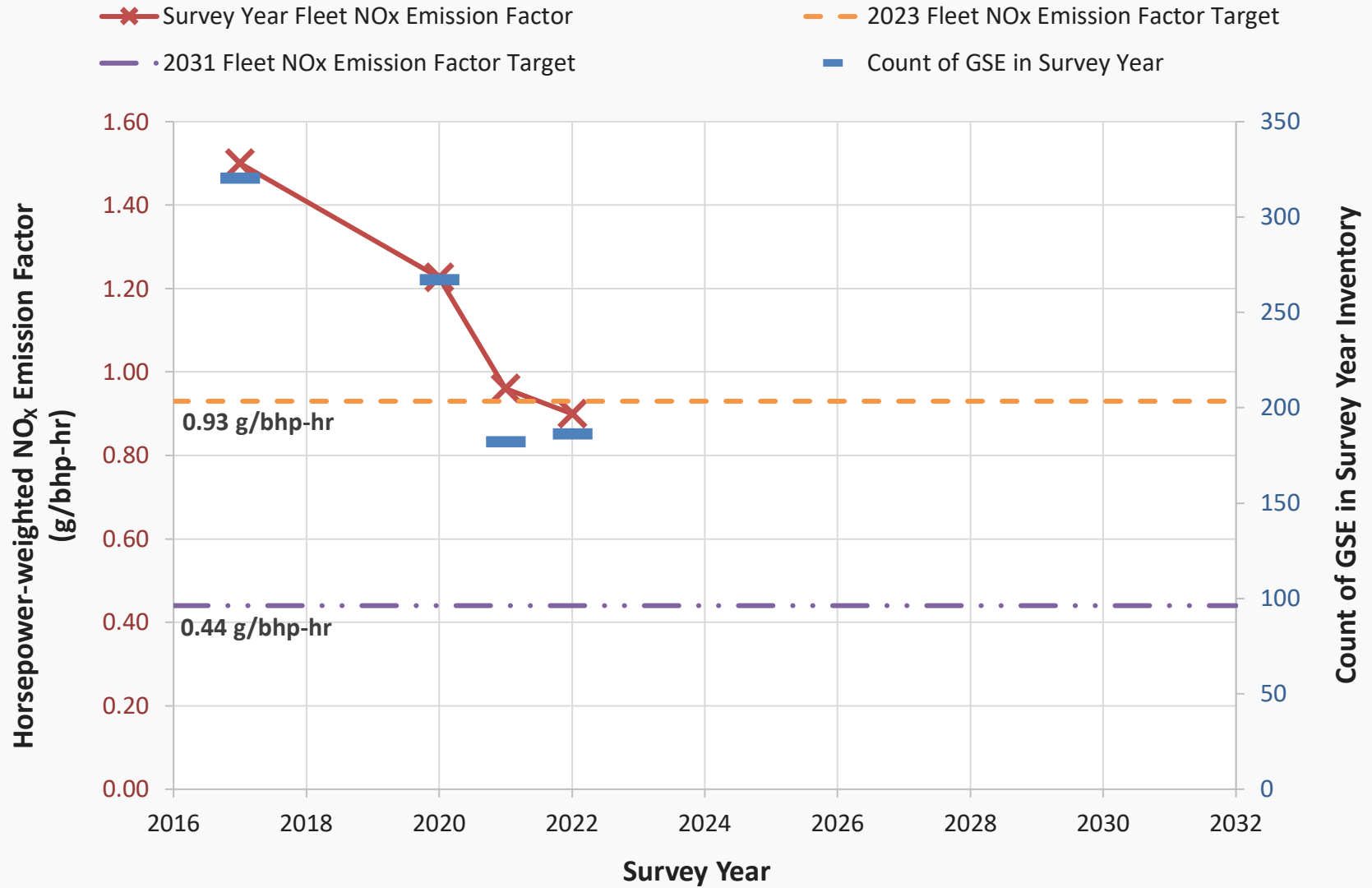
Long Beach Airport

Survey Year	Count of Equipment ^[1]	Percent Electric ^[1]	<i>OFFROAD Method</i>	<i>CARB Factors Method</i>	<i>MOU Fleet Performance</i>
			NO _x ^{[2][3]} (short tons)	NO _x ^{[2][4]} (short tons)	NO _x ^{[1][3][5]} (g/bhp-hr)
2017	320	48.4%	16.78	22.05	1.50
2018					
2019					
2020	267	40.8%	16.02	15.64	1.23
2021	182	48.4%	--	7.70	0.96
2022	186	51.6%	--	7.48	0.90
2023					
2023				Performance Target:	0.93
2024					
2025					
2026					
2027					
2028					
2029					
2030					
2031					
2031				Performance Target:	0.44
2032					

Notes:

- [1] Low-use and <25 horsepower non-electric equipment **excluded**
- [2] All reported equipment, including low-use and <25 hp equipment **included**
- [3] Emission factors back-calculated from OFFROAD2017 annual emissions outputs.
- [4] Emission factors provided by CARB July 2021 based on certified engine standards (LSI) and 2017 ORDAS model (ORD).
- [5] Calculated as a fully-loaded horsepower-weighted factor consistent with the methodology employed throughout the development of the **SCAQMD and City of Long Beach 2019 MOU**.

Long Beach Airport GSE Program Performance



GSE Program Inventory by Fuel

LGB Calendar Year 2022	Fleet Inventory Equipment Count <i>(including <25hp non-electric and low-use equipment)</i>			Fleet Inventory Annual Emissions <i>(including <25hp non-electric and low-use equipment)</i>				
	In-Use (any fuel)	Low-Use (any fuel)	Total (any fuel)	NO _x (short tons)	PM ₁₀ (short tons)	PM _{2.5} (short tons)	CO ₂ e (metric tons)	SO _x (short tons)
Overall Fleet	193	24	217	7.5	0.245	0.220	1,302	0.0046
Overall Fleet Percent	88.9%	11.1%	--	--	--	--	--	--
Diesel	54	10	64	4.0	0.188	0.173	595	0.0029
<i>Tier 4</i>	25	3	28	0.7	0.027	0.025	242	0.0012
<i>Tier 4i</i>	3	1	4	0.1	0.003	0.003	31	0.0002
<i>Tier 3</i>	8	1	9	0.7	0.038	0.035	132	0.0006
<i>Tier 2</i>	2	1	3	0.1	0.006	0.005	16	0.0001
<i>Tier 1</i>	4	3	7	1.4	0.049	0.046	113	0.0005
<i>Tier 0</i>	5	1	6	0.9	0.063	0.058	52	0.0002
<i>On-Road</i>	7	0	7	0.0	0.001	0.001	10	0.0000
Gasoline	32	11	43	2.0	0.043	0.032	541	0.0017
<i>Pre-2010</i>	8	9	17	1.7	0.011	0.008	135	0.0004
<i>2010 and Newer</i>	24	2	26	0.3	0.032	0.024	406	0.0013
LPG	11	2	13	1.5	0.014	0.014	165	0.0000
<i>Pre-2010</i>	9	1	10	1.5	0.012	0.012	135	0.0000
<i>2010 and Newer</i>	2	1	3	0.0	0.003	0.003	31	0.0000
Electric	96	1	97	0.0	0.000	0.000	0	0.0000